



DVD PLAYER

DV-09

Operating Instructions

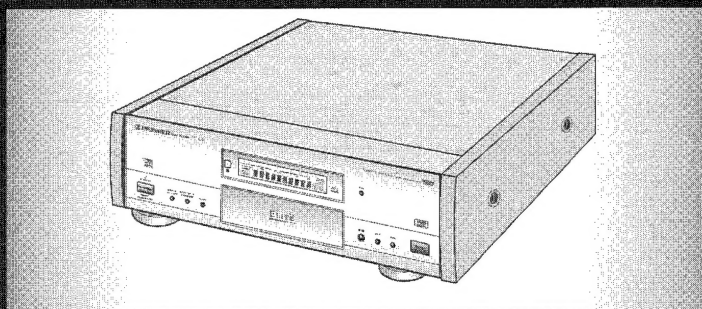
DV-09

NTSC



Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

- This player is not suitable for commercial use.



IMPORTANT



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNINGS — All warnings on the product and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

CLEANING — Unplug this product from the wall outlet before cleaning. The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzene, insecticides or other volatile liquids since they may corrode the cabinet.

ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

CART — A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

LOCATION — The appliance should be installed in a stable location.

NONUSE PERIODS — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

GROUNDING OR POLARIZATION

• If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

• If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

OUTDOOR ANTENNA GROUNDING — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.

LIGHTNING — For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

OVERLOADING — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance — this indicates a need for service.

REPLACEMENT PARTS — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

WALL OR CEILING MOUNTING — The product should not be mounted to a wall or ceiling.

HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

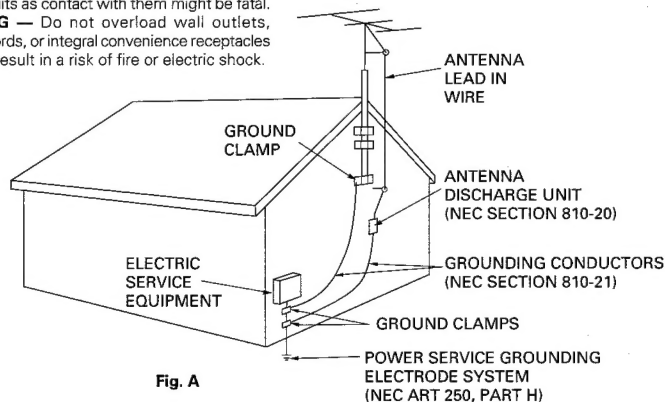


Fig. A

NEC — NATIONAL ELECTRICAL CODE

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE

[For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian model]

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

CAUTION: This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

THE POWER SWITCH IS SECONDARY CONNECTED AND THEREFORE DOES NOT SEPARATE THE UNIT FROM MAINS POWER IN STANDBY POSITION.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

CAUTION

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- The use of optical instruments with this product will increase eye hazard.

[For Canadian model]

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

[Pour le modèle Canadien]

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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Introduction

THX

With their experience in movie making and DVD mastering, Lucasfilm engineers researched the capabilities of the DVD format. They have identified many key areas of importance that are necessary to ensure the highest quality possible for video and audio playback.

The Home THX DVD specification was created to realize the full potential of the format.

The THX DVD program is a number of technical and performance specifications developed to make certain that the audio and video quality of every DVD recording is reproduced as accurately as possible.

Thus exploiting the medium's maximum potential.

Pioneer and THX have engineered this product to give maximum performance and quality.

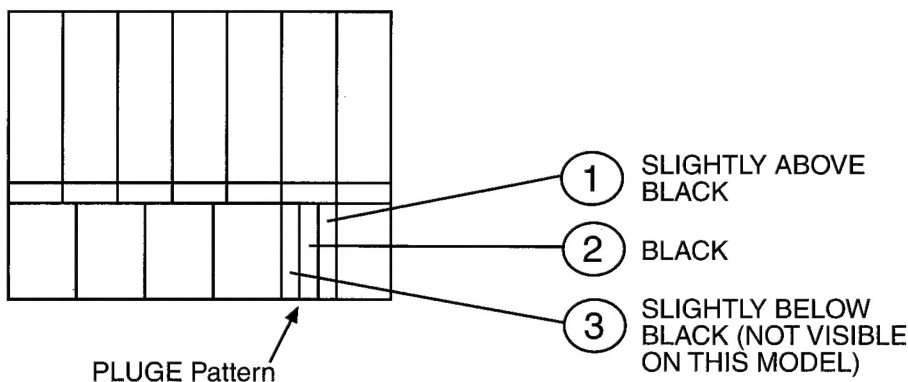
Manufactured under license from Lucasfilm Ltd. Lucasfilm and THX are trademarks of Lucasfilm Ltd.

SPECIAL INFORMATION FOR TECHNICIANS: ADJUSTING TELEVISION BLACK LEVEL USING PLUGE TEST SIGNAL

This DVD player is designed to reproduce video signals at all brightness levels in the standard NTSC signal. Signal levels darker than standard black are not reproduced. Therefore, please use this special technique to adjust television black level with a standard PLUGE test pattern.

1. Connect DVD player to TV monitor; play PLUGE test pattern (such as SMPTE color bars with PLUGE).
2. The PLUGE part of the test pattern is in the lower right hand section of the color bars frame.
3. Using the TV monitor black level (brightness) control, adjust the middle PLUGE line ② as dark as possible while keeping the lighter PLUGE line ① still visible as a slightly brighter shade. The darkest line ③ will not be visible.

SMPTE Color Bars with PLUGE



Connecting the Player

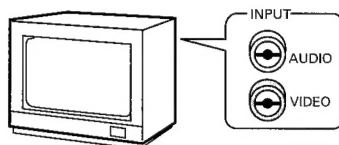
Precautions when connecting the player

This player's Analog copy protect technology is copy guarded. If you connect the player to a TV via a VCR, or record and playback the contents of a disc with a VCR, the playback picture may not be normal.

Select one of the following ways to connect the player to your TV.

Connection example 1.

To a TV with video input



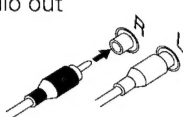
If your TV has a video input, and it is available for use, this is the easiest way to hook up the player.

Video out

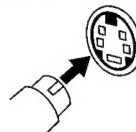


- Connect plugs to the terminals that match the plug's color (white, red, yellow).

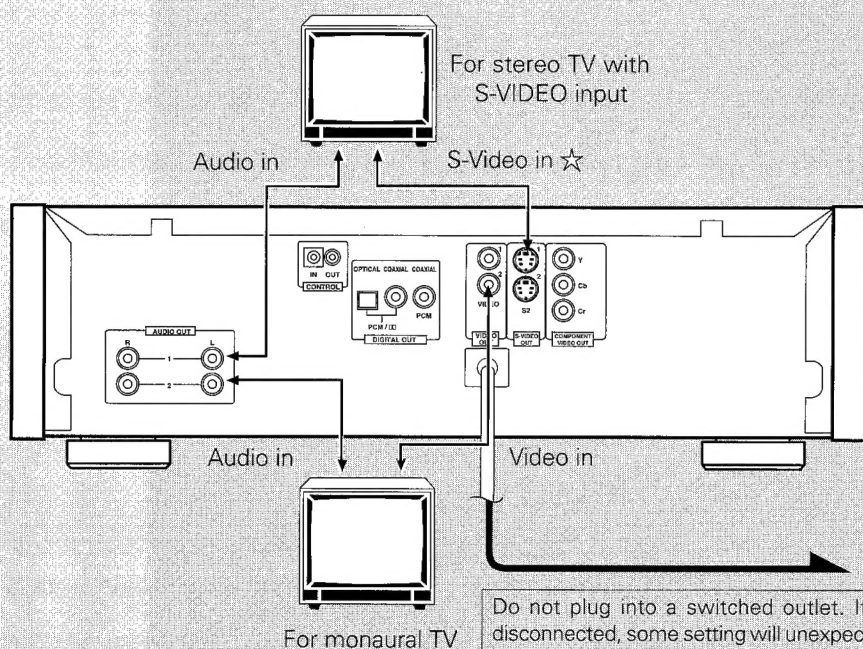
Audio out



S-Video out



- Connect the TV with S-VIDEO terminal to the S VIDEO OUT terminal of this player.



Finally, connect to a home wall outlet.

Do not plug into a switched outlet. If the player is on and the power is disconnected, some setting will unexpectedly be cleared (see Troubleshooting).

- Please also refer to the manual for the TV (monitor TV or VCR) that you are making connection to.

Note

☆ Cables can be found at your local audio/video dealer.

Connection example 2.

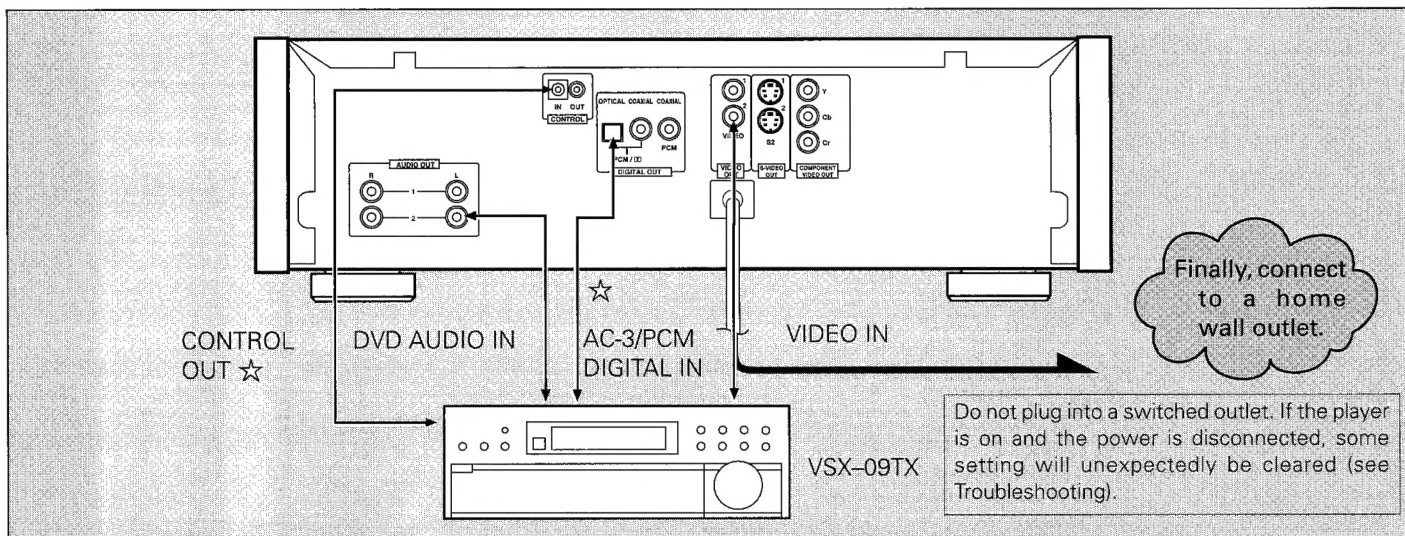
AV receiver with digital input for Dolby Digital (AC-3).



When connecting the player to an amp with Dolby Digital (AC-3) inputs.

*Make this connection when using this unit with Pioneer's VSX-07TX, VSX-09TX AV receiver.

- Connect this unit's digital output PCM/ jack to the Dolby Digital (AC-3) input jack of a Dolby Digital compatible amplifier.
- Select whether or not to use the coaxial digital output according to the amplifier's input jack.



- The digital output setting is set to 96KHz. Digital output is prohibited for some discs.

Please set the amplifier's function as follows when playing back a disc on this unit.

DVD playback: DVD

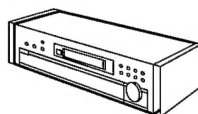
Other discs that can be played back such as a CD etc.: CD

Note

★ Cables can be found at your local audio/video dealer.

Connection example 3.

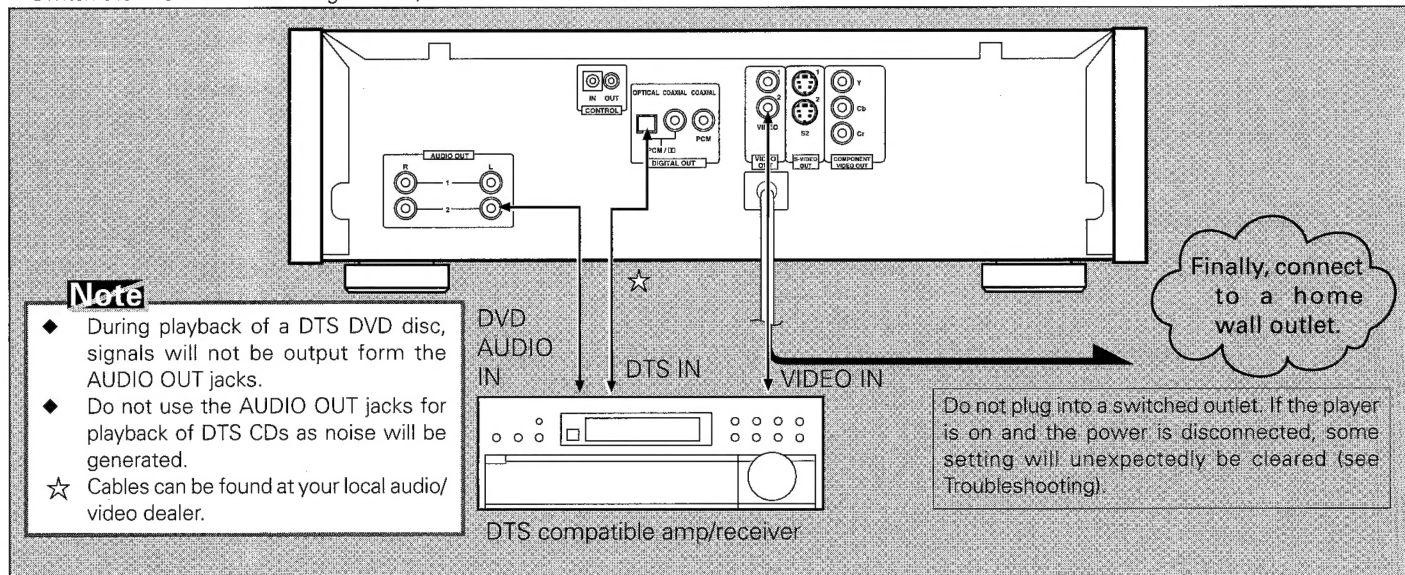
AV receiver with digital input for DTS.



When connecting the player to a DTS compatible receiver with DTS input.

When playing back a disc recorded with the DTS signal, use a DTS compatible amp or receiver and be sure to use the DIGITAL OUT "PCM/ " jack.

- Switch the DIGITAL OUT setting to PMC/DOLBY DIGITAL•DTS.



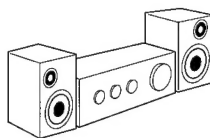
Note

- ◆ During playback of a DTS DVD disc, signals will not be output from the AUDIO OUT jacks.
- ◆ Do not use the AUDIO OUT jacks for playback of DTS CDs as noise will be generated.

★ Cables can be found at your local audio/video dealer.

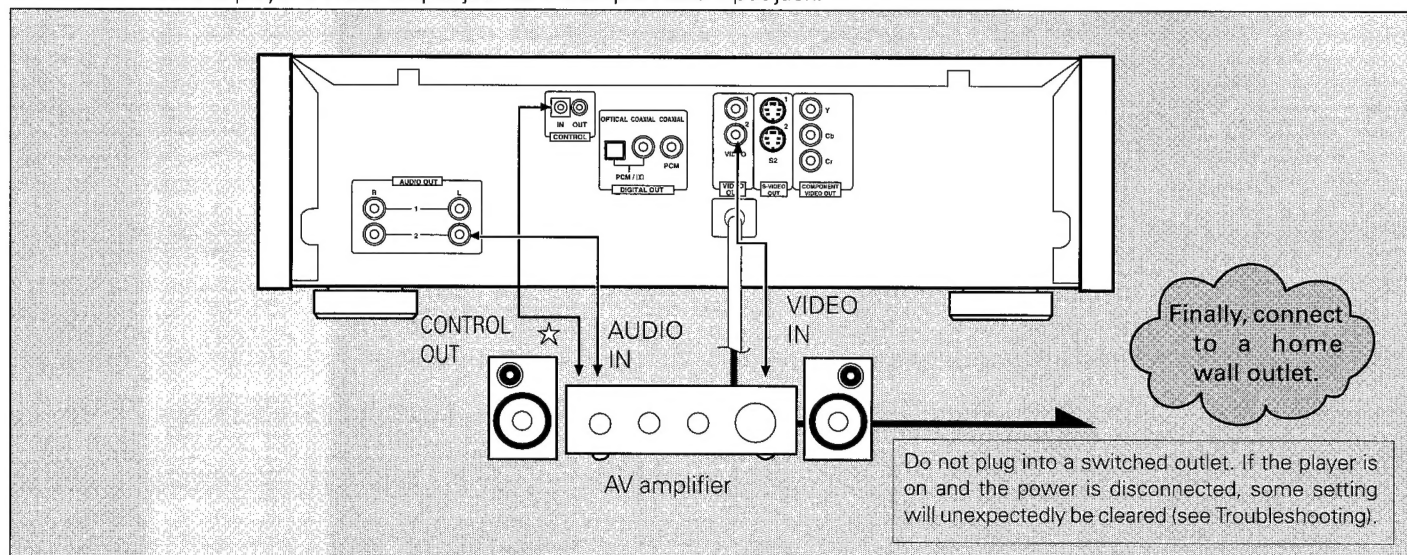
Connection example 3.

AV amp



By connecting to a regular AV amp or stereo amp, you can enjoy playback with improved sound quality.

- Connect this player's audio output jacks to an amp's CD, LD, AUX or other audio input jacks. (Do not connect to PHONO jacks.)
- Connect this player's video output jack to the amp's video input jack.



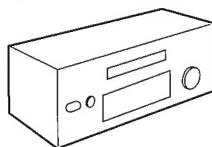
- **When connecting to a component bearing the Pioneer SR mark:**
If you use a commercially available cord with a mini plug (no resistance) to connect this player's CONTROL IN jack to the control output jack of another component bearing the SR mark, you can control the player as though it were a component in a system (system control).
- If you connect for system control, you cannot operate the player directly by pointing the remote control at it and pressing buttons.
- When controlling as a system, be sure to make connection to the amplifier using an audio cord, even when using only digital components.
- Surround sound can be enjoyed with amplifiers that have a built-in Dolby Pro Logic decoder.
- For more details, refer to the connected component's operation manual.

Note

☆ Cables can be found at your local audio/video dealer.

Connection example 4.

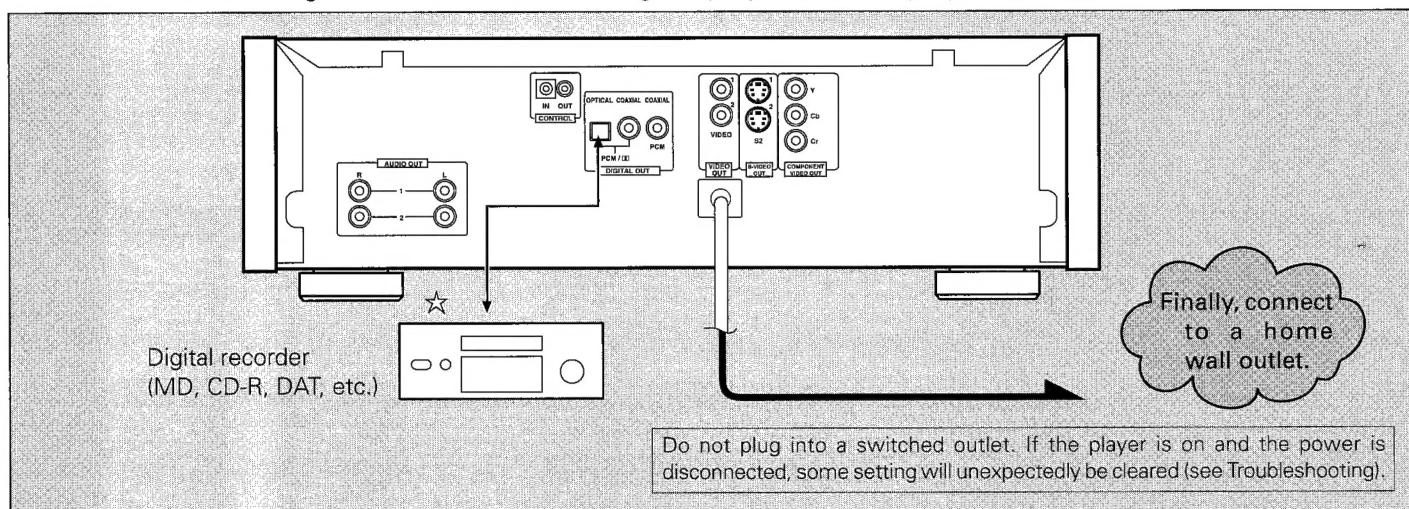
Digital recording components



Digital recording components such as an MD, CD-R or DAT can be connected.

Make either optical digital or digital output (Coaxial) connection.

- For optical digital connection, connect the optical digital input jack to the output jack.
- For coaxial digital connection, connect the digital input jack to the output jack.



Note

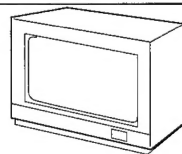
When recording a Dolby digital compatible DVD, set "Digital output" to the PCM setting as explained on page 28. When the DVD is recorded in

Dolby Digital (AC-3), noise will be recorded if the setting is left at PCM/DOLBY DIGITAL

☆ Cables can be found at your local audio/video dealer.

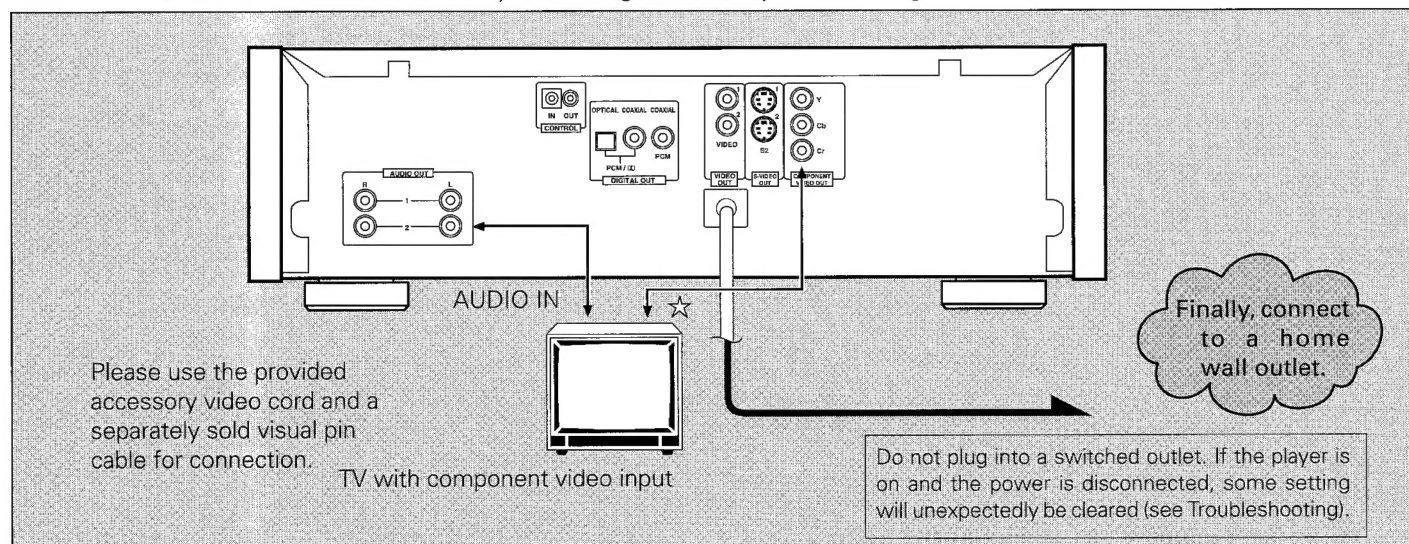
Connection example 5.

TVs with a color difference jack



A better picture can be viewed by using a TV that has a component video input.

- By combining this player with a TV that has a color difference input, this input can be used as the video input, resulting in a better picture.
- The name used for the color difference jack will differ depending on the TV.
- When the color is too dark or color phase changes, make adjustment using the TV's controls.



Note

☆ Cables can be found at your local audio/video dealer.

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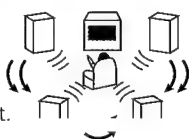
See What You Can Do

Various picture quality adjustment features for faithful reproduction of original picture

- Component frame digital noise reduction (adjustable between 9 levels)
- Picture noise reduction
- Sharpness (horizontal, vertical, adjustable between 9 levels)
- Black Level (adjustable between 2 levels)
- Chroma level (adjustable between 9 levels)
- Y/C timing adjuster

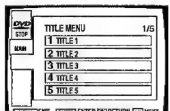
Dolby Digital*

Connect to a Digital Surround Amp and Surround Processor for 5.1ch Dolby Digital Surround entertainment.



GUI Operation

While viewing Pioneer's original GUI on-screen displays, you can perform operations by remote control. Even if there is no menu recorded on a disc, you can still perform GUI operation with the menu provided by the player.



Last Memory Play*

If you stop watching a video part way through, this lets you continue watching from the same place later.



Still Frame, Slow Play, Single Frame Advance*

You can view still frames, slow play, and advance one frame at a time.



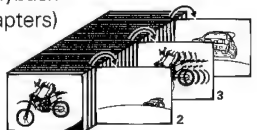
Repeat Play*

Wide range of Repeat Play possibilities.



Random Play*

You can enjoy playback of tracks (or chapters) in random order.



Program Play*

Lets you play back selected titles and chapters in any desired order.



Multi-Aspect*

You can select between Regular, Wide, and Letter Box display formats.



Condition Memory*

The following settings of DVDs that you often watch can be recorded, and recalled automatically.

- Multi Aspect
- Multi-Language Subtitles
- Multi-Language

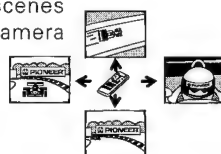
Multilingual Subtitles*

You can select a desired subtitle language when watching movies and other videos.



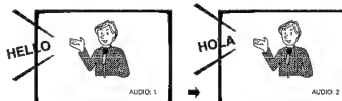
Multi-Angle*

Lets you view scenes from different camera angles.



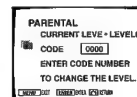
Multiple Languages*

With discs that have multiple language soundtracks recorded on them, you can select the desired language.



Parental Level*

Lets you select a "parental level" (user restriction level) to prevent children viewing undesirable material.



FL Dimmer

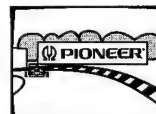
The brightness of the FL display can be selected from 4 steps.

DTS*

This unit DTS compatible. When connected to a DTS compatible amp or receiver, discs marked with the DTS symbol can be played back.

PBC Video CD Compatibility

Ready to play Video CDs (Version 2.0) with PBC (Play Back Control). Two types of playback possible depending on the disc.



Power On Demo Display

Switching ON the Power On Display provides a wide range of indications. To turn on the POWER ON DEMO display, press the POWER switch while pressing the ►► button. Press either button to turn the display off.

* Indicates this feature may not be possible with certain discs.

This product incorporates copyright protection technology that is protected by method claims of certain U. S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Disc Types Compatible with This Unit

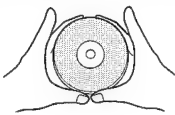

This player is DVD, CD, and Video CD compatible. The marks shown on the right are found on disc labels or on disc jackets.

- This player can play all discs bearing the marks on the right without the need for an adaptor.
- To prevent malfunction, do not use an 8 cm (3 in.) adaptor (for CDs).

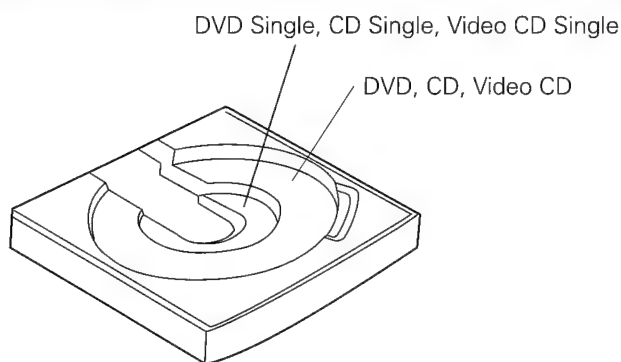
This unit is NTSC compatible (the U.S. and Canadian TV system). You cannot use discs other than those shown on the right.


* During DVD playback, data transfer is at 4.7 MB per second.

Handling the discs

Holding with both hands	
Holding with one hand	

Disc Table



Types of playable discs and their marks	Diameter/Playable sides	Playback time
	DVD VIDEO*	Digital audio Digital video (MPEG 2)
	12 cm (5 in.)/ single-sided	1 layer 2 layer
	12 cm (5 in.)/ double-sided	1 layer 2 layer
	DVD VIDEO*	Digital audio Digital video (MPEG 2)
	VIDEO CD	Digital audio Digital video (MPEG 1) Max. 74 minutes
	12 cm (5 in.)/single-sided	
	VIDEO CD single	Digital audio Digital video (MPEG 1) Max. 20 minutes
	8 cm (3 in.)/single-sided	
	CD	Digital audio Max. 74 minutes
	12 cm (5 in.)/ single-sided	
	CD single	Digital audio Max. 20 minutes
	8 cm (3 in.)/ single-sided	

Discs other than the ones indicated above can not be played on this unit.

To avoid damage etc., do not play any discs other than those indicated above.

Ex: DVD-Audio, DVD-ROM, CD-ROM, CD-R etc...

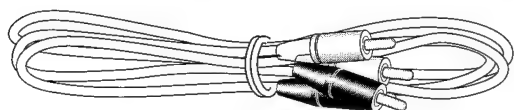
Note

- ◆ You cannot play DVDs that do not bear the Region No. (refer to "Terms" on page 57) indicated on the player's rear panel.
- ◆ Please use the DIGITAL OUT jacks when using a disc that is recorded with DTS audio, as noise will be generated from the AUDIO OUT jacks. In this case, select PCM/DOLBY DIGITAL•DTS from the menu.

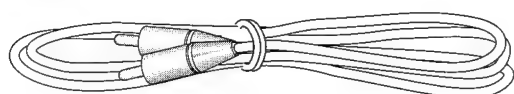
Before Using

Check accessories

Audio cord



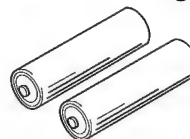
Video cord



Remote control unit



Batteries....2

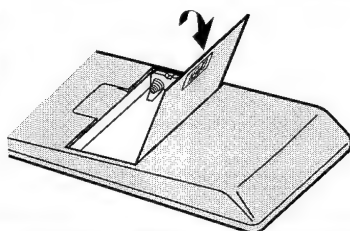


Other included items:

- Warranty card
(Region number ① models only)
- Operating Instructions
(this manual)

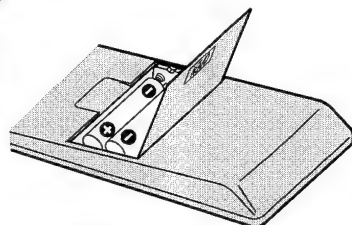
Inserting batteries into the remote control

1



While pressing the back cover, pull out in the direction indicated by the arrow.

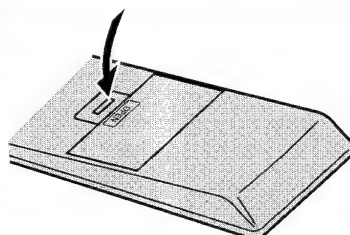
2



Insert batteries.

Make sure to match the plus (+) and minus (-) polarity guides on the batteries with the marks inside the battery compartment.

3

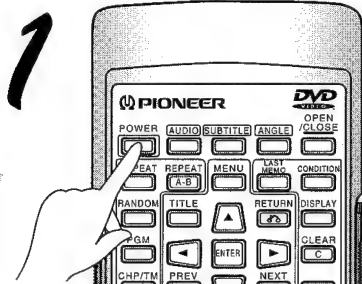


Close the cover.

Note

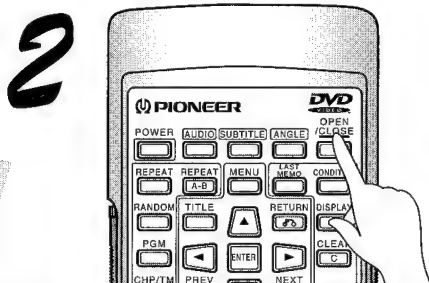
- ◆ Do not mix old and new batteries.
- ◆ Even batteries of the same type will differ in voltage. Do not mix old batteries with new batteries.
- ◆ When not using the remote control for a long period of time (over 1 month), remove the batteries to avoid possible damage from battery corrosion. If battery leakage occurs, wipe the battery liquid from the battery component, then insert new batteries.

Playing DVDs, CDs and Video CDs



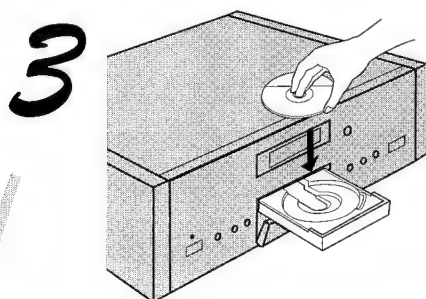
Press the POWER button.

- The STANDBY indicator on the player turns off.



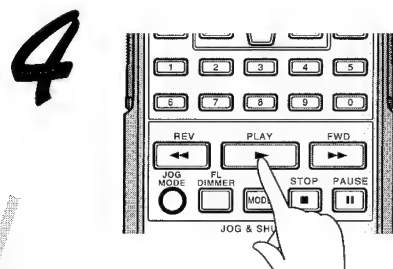
Press the OPEN/CLOSE button.

- Press the / button on the front of the player.
- The disc table comes out.



Load a disc.

- Load a disc with the label side facing up, using the disc table guide to align the disc.



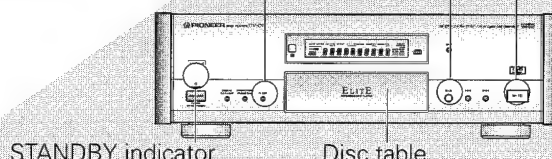
Press the PLAY button.

- The disc table will close, and playback will begin.
- Press the / button on the front of the player.
- Depending on the disc, a menu is displayed. If a menu is displayed, refer to page 42.

Note

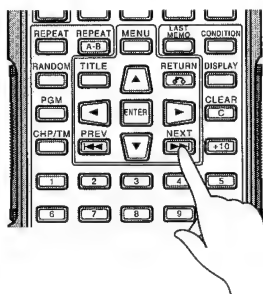
- ◆ Noise will be generated from the output when a DTS compatible CD or DVD is played back. When playing a DTS CD, use the DIGITAL OUT jacks and not the AUDIO OUT jacks (Refer to p.8). Also, please use a DTS compatible amp or receiver.
- ◆ DVDs that do not have the matching region No. that allows playback can not be played back (refer to the "Terms" section on page 57).
- ◆ Only DVD VIDEO discs can be played back.
- ◆ During operation, the following marks may appear on the TV screen.
 - : Appears when this player cannot perform the selected function.
 - : Appears when the disc cannot perform the selected function.

FL OFF indicator / button / button



Chapter (Track) Skip Forward/Skip Back

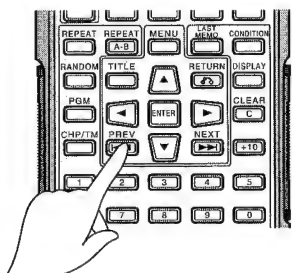
Skipping forward to the next chapter (track)



Press the **NEXT** ►► button.

- Press to skip forward to the next chapter (track).
- The ►► button on the front panel has the same function.

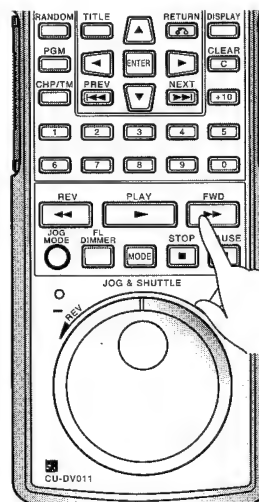
Skipping back to the previous chapter (track)



Press the **PREV** ◄◄ button.

- Press once to skip back to the start of the chapter (track) currently playing.
- Press again to skip back to the start of the previous chapter (track).
- The ◄◄ button on the front panel has the same function.

Fast forward



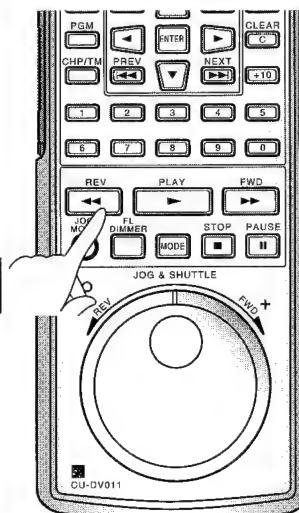
Press and hold the **FWD** ►► button.

- If the FWD ►► button is held down for a few seconds, the indicator on the screen will stop flashing and remain constant. Fast forward will then continue even if the button is released.

Turn the shuttle ring to the right

- Speed can be increased by up to approximately 30 times the normal speed, depending on the amount the ring is turned. Releasing the ring returns the speed to the normal setting. The "SCAN" indicator does not light during this operation.

Fast reverse

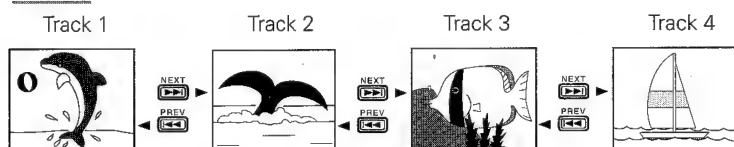
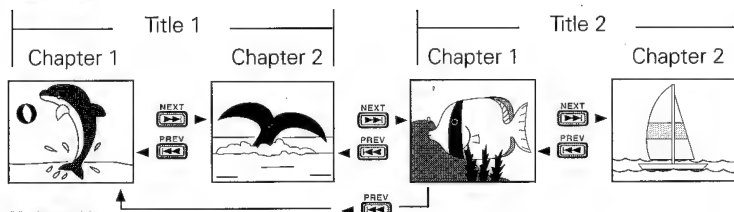


Continue pressing the **REV** ◄◄ button.

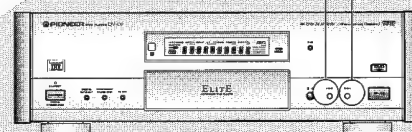
- If the REV ◄◄ button is held down for a few seconds, the indicator on the screen will stop flashing and remain constant. Fast reverse will then continue even if the button is released.

Turn the shuttle ring to the left

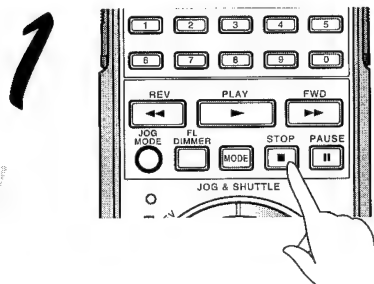
- Speed can be increased by up to approximately 30 times the normal speed, depending on the amount the ring is turned. Releasing the ring returns the speed to the normal setting. The "SCAN" indicator does not light during this operation.



►► button
◄◄ button

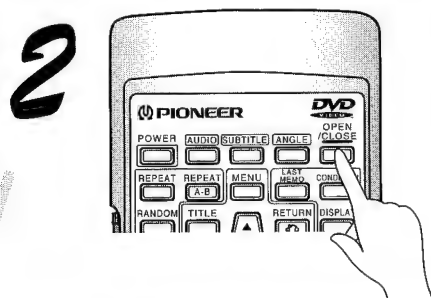


Stopping Playback & Switching Power OFF



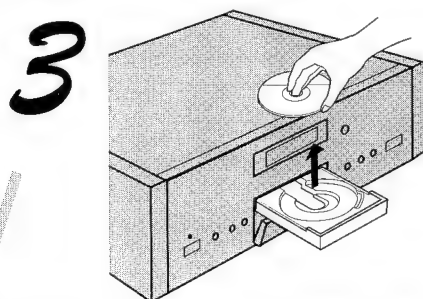
Press the STOP button.

- On the front panel, press ■/▲.
- Playback stops.



Press the OPEN/CLOSE button.

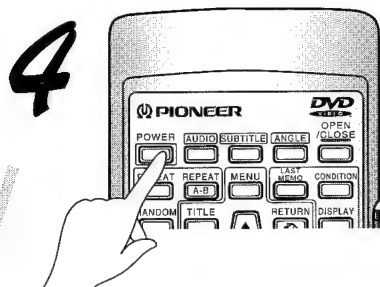
- On the front panel, press ■/▲.
- The disc table comes out.



Remove the disc.

Note

- ◆ You can stop part way through and continue playback later from the point where you stopped. Refer to page 18



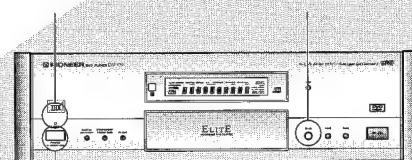
Press the POWER button.

- The disc table goes back in, power switches OFF, and the STANDBY indicator lights.

STANDBY indicator

■/▲ button

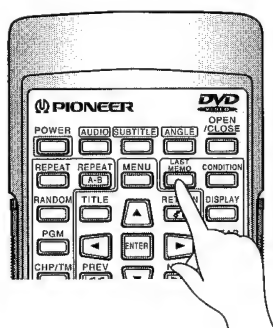
POWER button



Stopping Playback
& Switching Power OFF

Continuing Playback from Where You Stopped

Memorizing the place where you stopped watching (LAST MEMORY)



Press the LAST MEMO button during play.

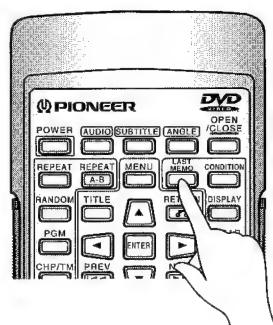
- The LAST MEMORY indicator lights on the player.
- Press the POWER button to switch power OFF, or press the STOP ■ button to stop playback.



Tips

- With DVDs, LAST MEMORY memorizes video, audio, display, and other settings as well as the place where playback stopped.
- Even with a disc you have memorized with LAST MEMORY, playback begins at the start of the disc if you press the PLAY ► button.
- When you continue playback from the point where you stopped, LAST MEMORY is automatically canceled for that disc.
- If you register more than five DVDs in LAST MEMORY, details of the latest disc are memorized, while details of the least recent disc (the disc you registered first) are erased.
- When a Video CD is ejected, memorized data will be cleared.
- In the case of DVDs, the Last Memory mode may not function for some titles.

Resuming playback from where you stopped



Press the LAST MEMO button during STOP.

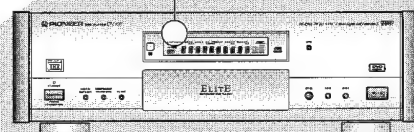
- When the power is turned off and a disc inserted, the power will be turned on and playback will start automatically.



Note

- ◆ This function is for playback of DVDs, Video CD. You cannot use it with CDs.
- ◆ When there is a power outage or you disconnect the player from the wall outlet while the power is ON, settings are cleared. If you do disconnect the power cord, be sure to turn the display window's "— OFF —" display off with the player's POWER button or the remote control's power button.
- ◆ When PBC playback is engaged on Video CDs, continuous playback may not be possible.

LAST MEMORY indicator



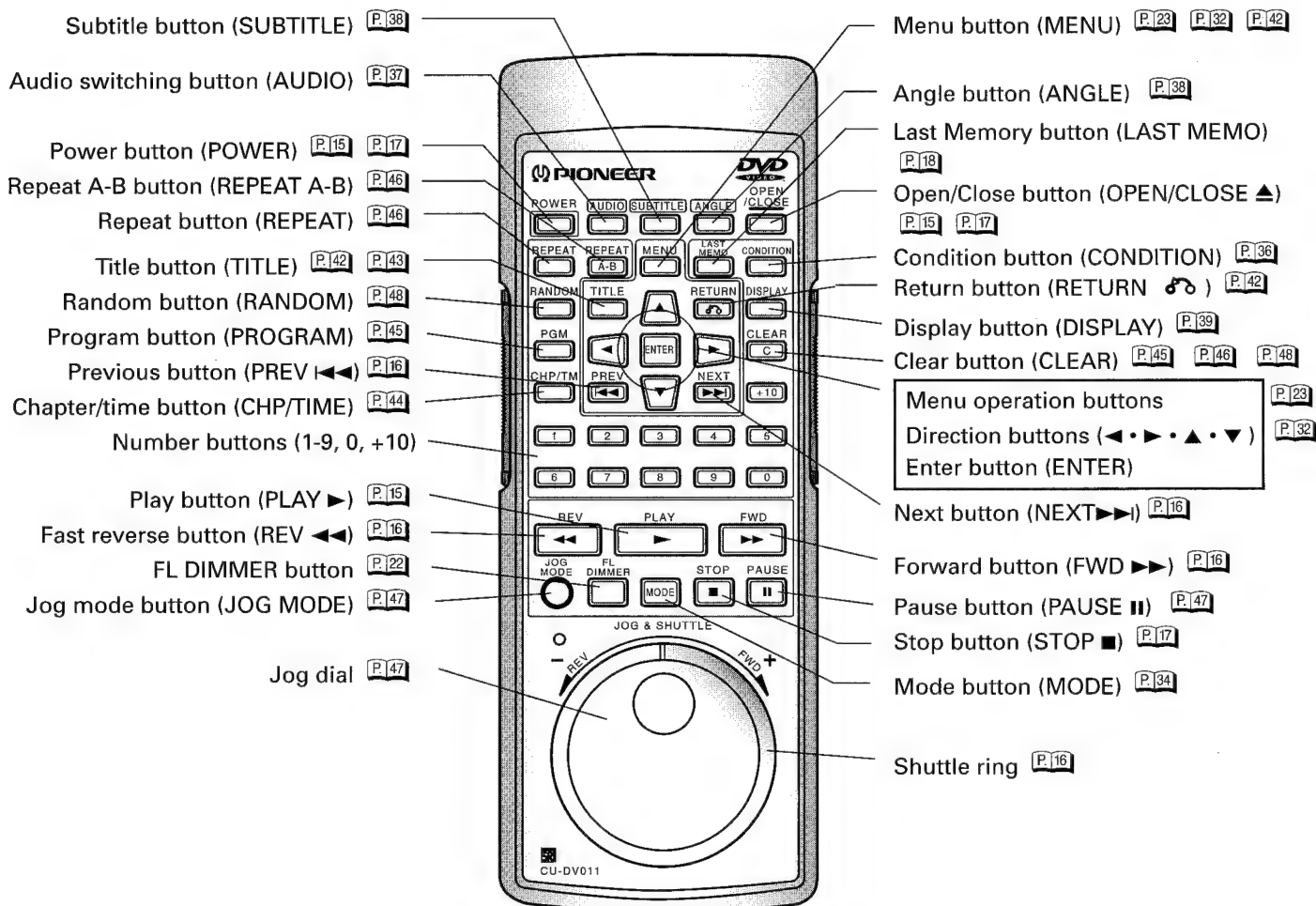
Initial Set-Up

Names and Functions

Remote control	20
Front panel	21
Rear panel	21
Display window	22
Button operation within each menu	23
Example of screen displays and operation	24

Names and Functions

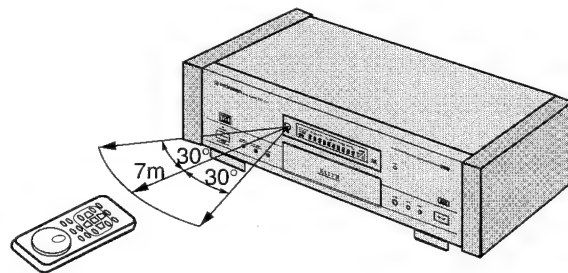
■ Remote control



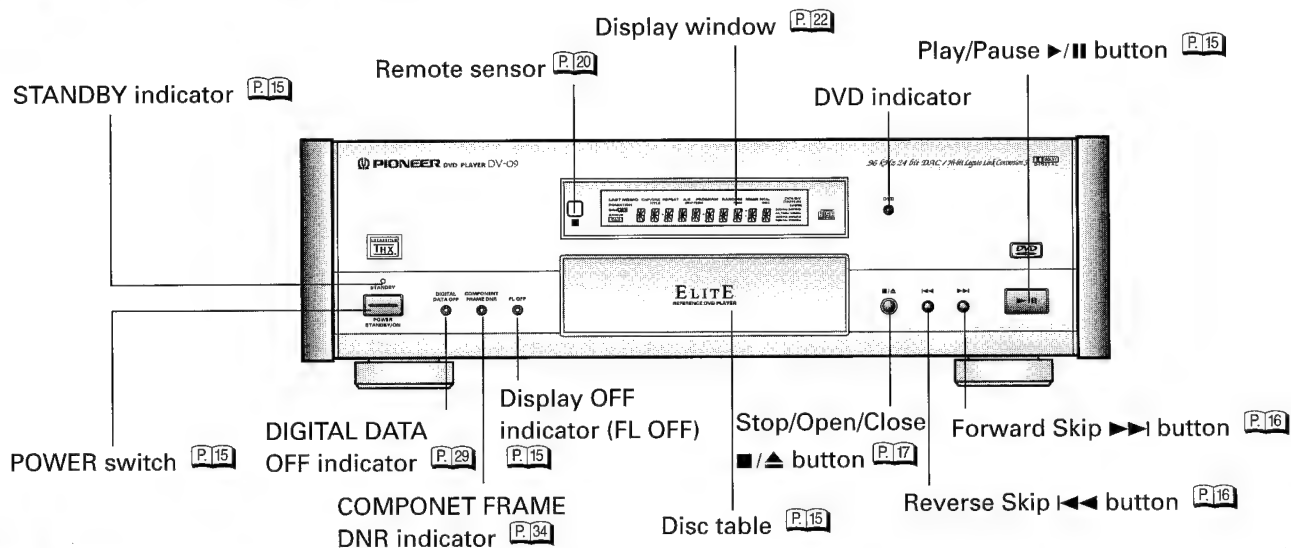
Remote control operation

When operating the remote control, point it at the remote sensor located on the player's front panel. The remote control can be used up to 23 feet (7 m) from the player and within a 30° angle each side of the sensor.

- Exposing the remote sensor to direct sunlight or strong light may cause faulty operation.
- If the CONTROL IN jack on the player's rear panel is connected to another component, point the remote control at that component for operation. Operation is not possible when pointed at this player (page 9).

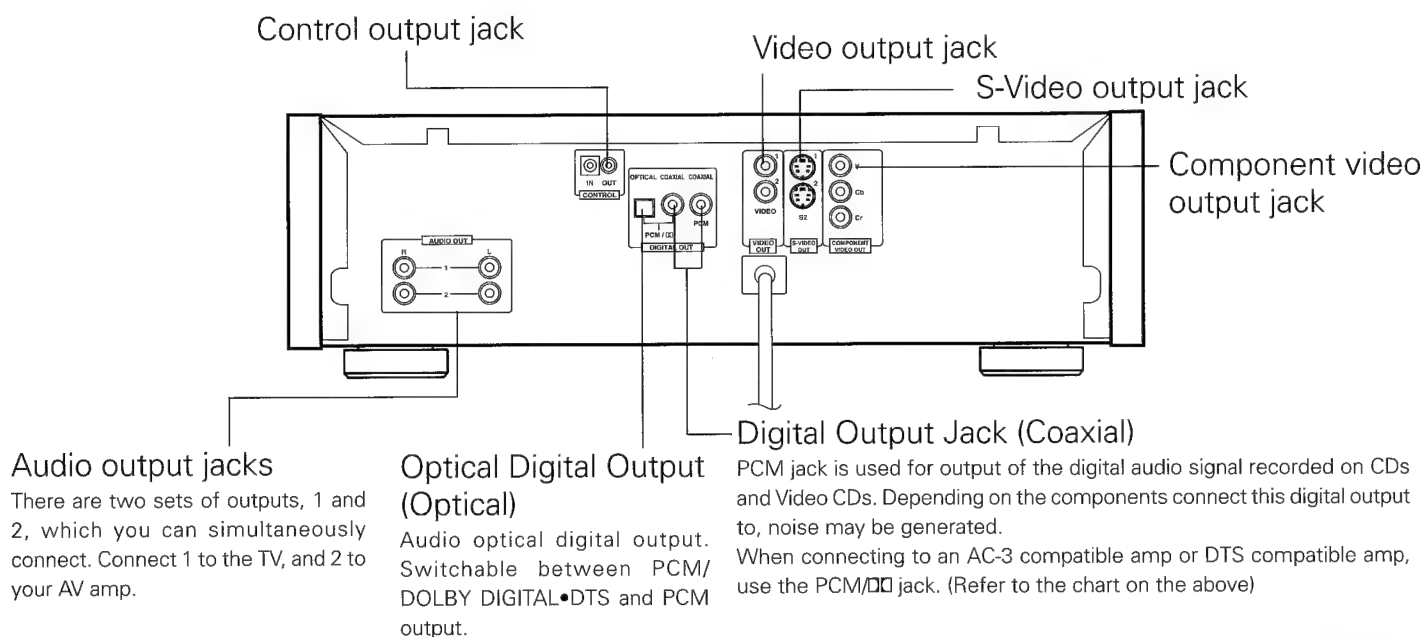


Front panel



Rear panel

Your amp	Regular AV amp	Coaxial	Connect to the coaxial jack, and select PCM from the menu.
		Optical	Connect to the optical jack, and select PCM from the menu.
	AC-3 compatible amp	Coaxial	Connect to the PCM/ [Dolby Digital icon] jack, and select PCM/DOLBY DIGITAL•DTS from the menu.
		Optical	Connect to the optical jack, and select PCM/DOLBY DIGITAL•DTS from the menu.
	DTS compatible amp	Coaxial	Connect to the coaxial jack, and select PCM/DOLBY DIGITAL•DTS from the menu.
		Optical	Connect to the optical jack, and select PCM/DOLBY DIGITAL•DTS from the menu.

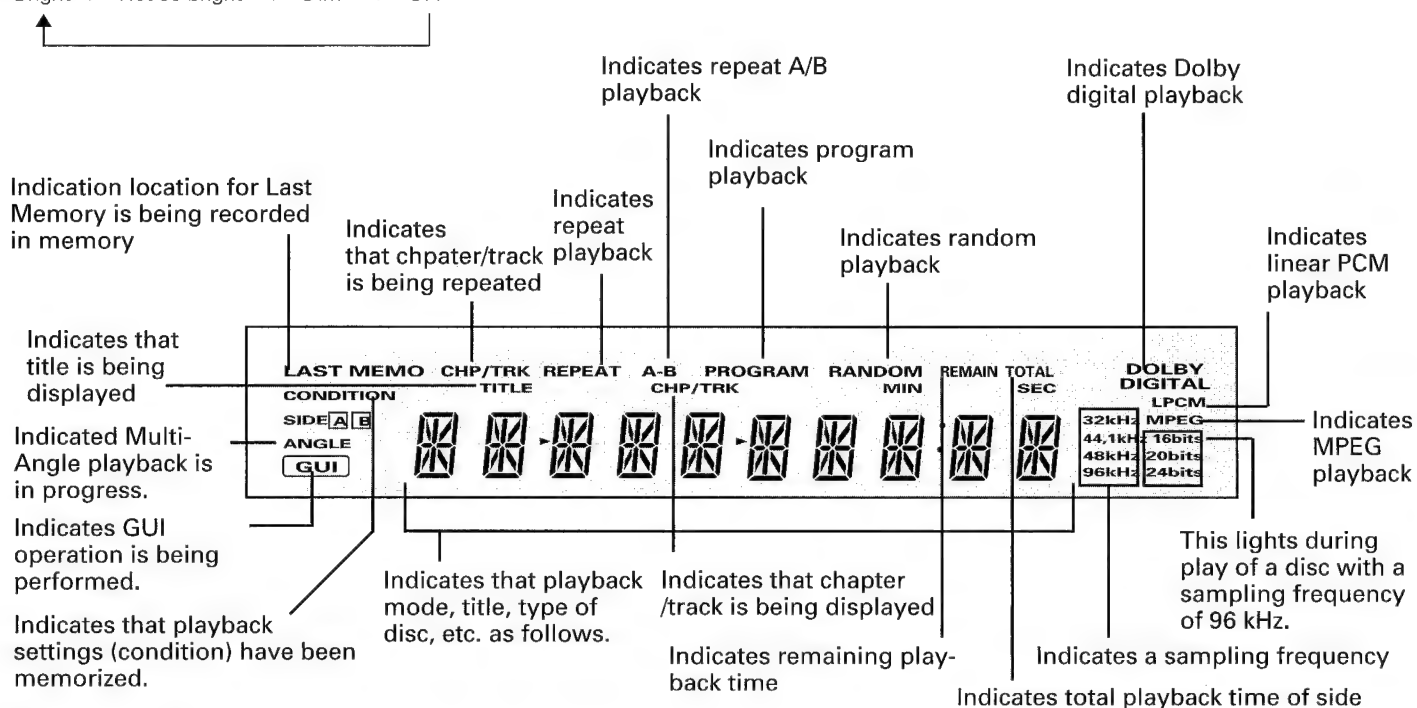


Names and Functions

■ Display window

When the remote control's FL DIMMER button is pressed, the brightness of the display window will change as follows.









Bright → Not so bright → Dim → OFF



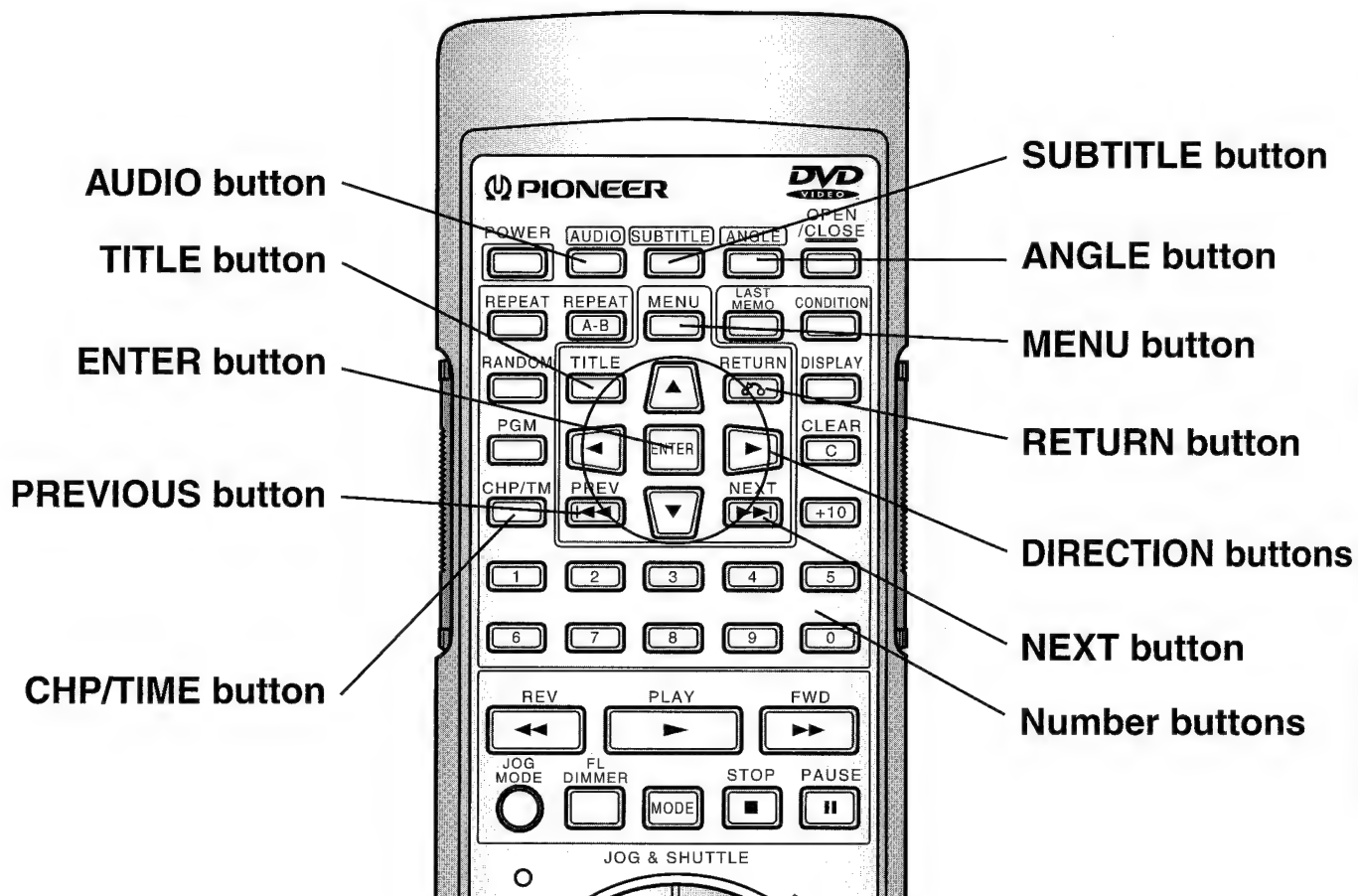
Sample Display

CD	: Compact disc	MENU	: Menu mode
DVD	: DVD	TITLE	: Title menu
VCD	: Video CD	SETUP	: Set-up menu
PBC PLAY	: Playback control playback on Video CD	COND_MEM	: Condition memory
OPEN	: Disc table is opening or is open	LAST_MEM	: Last memory
CLOSE	: Disc table is closing		
PLAY	: Playback		
STOP	: Stop		
-- OFF --	: Power is turned off		

Button operation within each menu

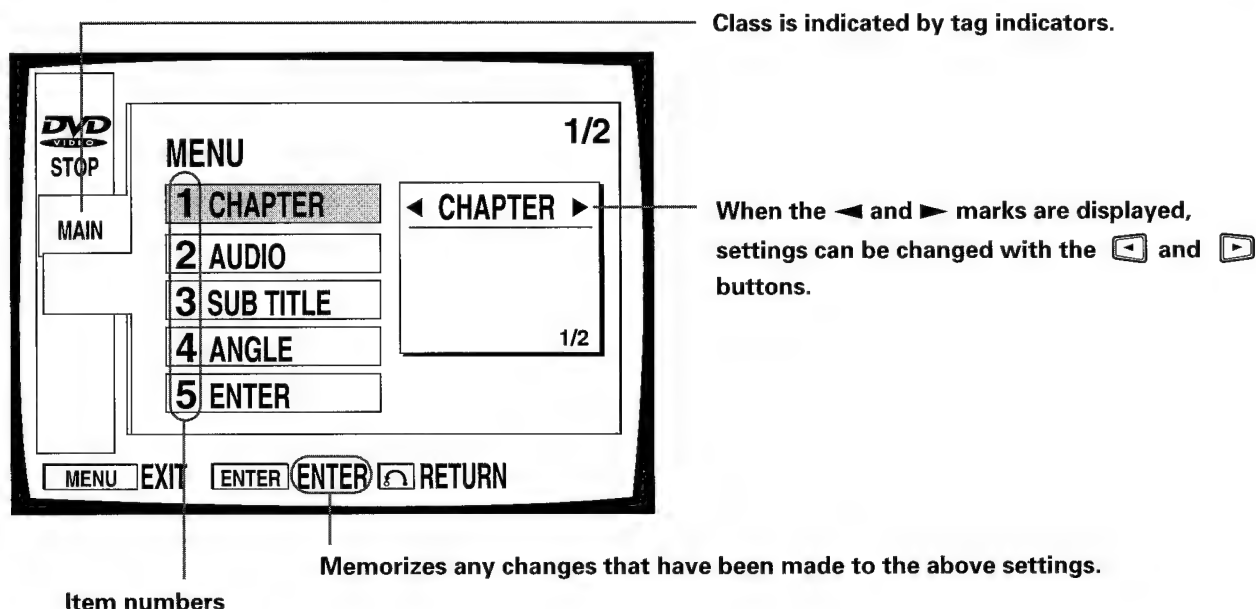
Button name	Button shape	Operation
MENU button		To leave the menu screen (settings are invalidated)
RETURN button		To return one menu screen back(settings will be memorized) However, search is invalidated.
Number buttons		Selection and conclusion (In the set up menu, some items only operate for selection.)
Direction buttons		Selection
ENTER button		Setting and implementation (playback mode is engaged after title or chapter change)
PREVIOUS button		To go to the previous page
NEXT button		To go to the next page
Direct buttons		To go to menus (setting selected before moving to a new menu will be invalidated)

Initial Set-up



Example of screen displays and operation

Ex. 1: Display contents and button functions within the Menu screen

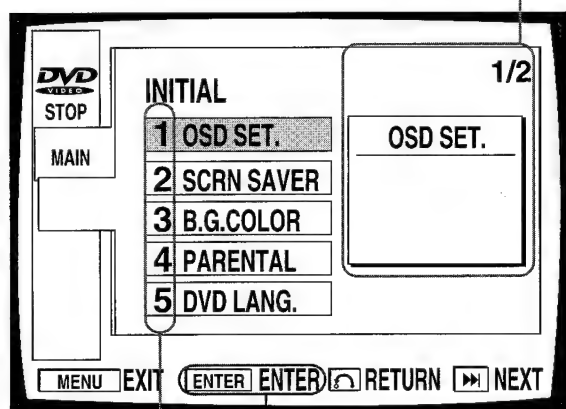


Selecting an item number by pressing the **number buttons** or using the ◀ ▶ buttons and then pressing the **ENTER button** will display the menu screen for that item number. Selecting item "5 ENTER" however, will memorize the changed settings and quit the mode.

Ex. 2: Display contents and button functions within the Set-up menu screen

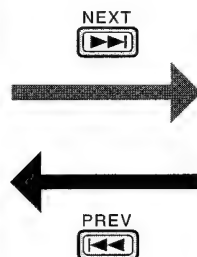
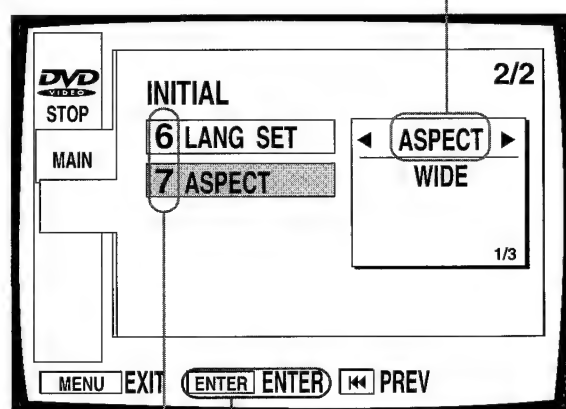
Current set-up condition

Item numbers are selected with the ◀ ▶ buttons, and settings are changed with the ◀ ▶ buttons.



Current set-up condition

When selection is made with the number buttons or the ◀ ▶ buttons, pressing the ENTER button will display the selection screen selected.



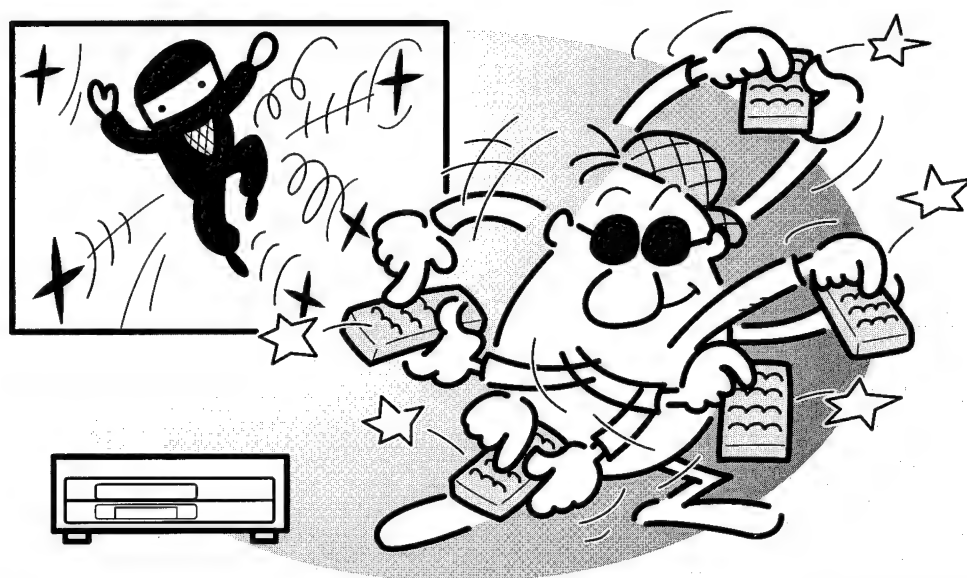
Selection item numbers

Selecting this will memorize changed settings and quit the mode.

Selection can be made with the number buttons. Selecting " 2 SCR N SAVER", " 3 B.G. COLOR", " 4 PARENTAL", " 5 DVD LANG.", " 6 LANG SET" or " 7 ASPECT" will display the selected screen. Also, changing the settings with the ◀ ▶ buttons and pressing the **ENTER button** will memorize the settings and quit the mode.

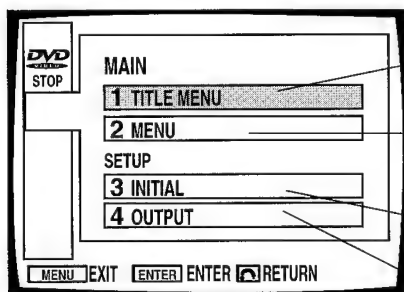
Adjustment to Picture and Sound During Playback

About the main menu	26
Changing Settings	27
How to Set Basic Audio and Subtitles	30
Aspect Ratio Setting for Wide Screen TV Software	32
Changing Picture and Sound Quality	34
Memorizing Settings for Often Viewed DVDs (Condition Memory)	36
Selecting Languages (Multi-Language)	37
Changing Audio Type	37
Selecting a Subtitle Language (Multi-Language Subtitles)	38
Viewing from a Desired Camera Angle (Multi-Angle)	38
Viewing Disc Information	39



About the main menu

The main menu is the menu used for selecting the Title menu screen, Menu screen and Set up screen.



In the Title menu screen:

Titles can be selected and played back. (Title search)

In the Menu screen:

Chapters (songs), subtitles, audio and angles within a title can be selected.

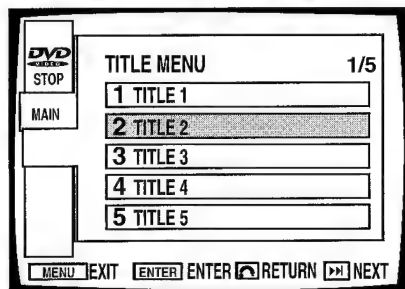
In the Initial setup screen:

The various functions of this player can be set up using the screen displays.

In the Output setup screen:

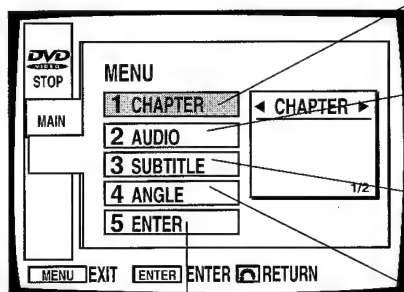
Audio to be output from the digital output terminal can be selected.

About the title menu



Titles can be selected and played back. This selection screen is the same as the one in "Direct Search with Title Numbers" on page 43.

Menu screen contents



To go to the Chapter screen

In the Chapter screen:

One chapter (song) within a title can be selected and played back.

To go to the Audio screen

In the Audio screen:

Audio contents can be selected on discs that include more than one audio language or audio type.

To go to the Subtitle screen

In the Subtitle screen:

Subtitle contents can be selected on discs that include subtitle information.

To go to the Angle screen

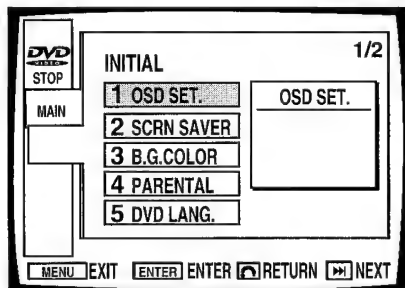
In the Angle screen:

The scene angle that you want can be selected on discs that include scenes that have been filmed from various angles.

Completes the setting of changes to the above items.

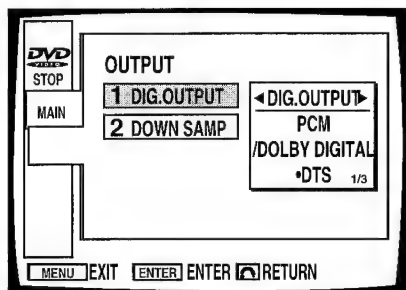
Changing Settings

About the initial setup screen





Used when changing various settings. The items and setting details are listed on the next page.

About the output setup screen




Used when selecting the audio to be output from the output terminal.
Set according to the amplifier being used.
Items and setting details are listed in detail on the next page.



Item Settings

Class		Item	Details	Settings	
				Initial settings (factory settings at the time of shipment)	
INITIAL	OSD. SET	DISPLAY	Operation displays (play, stop etc.) can be displayed or not displayed by selecting ON or OFF.	ON Operation displays appear.	OFF Operation displays do not appear.
		POSITION	When watching conventional software on a wide screen TV, the operation display is right at the top of the screen, and you may not be able to see it at all. Changing the position of the display lets you see operation indications clearly even on a wide TV screen.	NORMAL When using a conventional (4:3) TV	WIDE When using a wide screen TV (Not for menu displays.)
		LANGUAGE	This setting is used to display operation indicators and menu screens in either English, French or Spanish.	ENGLISH	FRENCH SPANISH
		ANGLE MARK	When a picture that is recorded in different angles is played back,  will be displayed. This setting lets you see clearly whether the playback picture is recorded with angles or not.	ON  is displayed.	OFF Not displayed
		SCRN SAVER	When a paused image is displayed for a long period of time, the image may be "burned" onto the screen. On this player, a screen saver function is included in order to prevent screen burn when an image such as a menu screen etc., is continuously displayed for a long time (more than 5 minutes). We recommend that you leave this mode ON.	OFF Screen saver is not functioning.	ON Screen saver is functioning.
		B.G. COLOR	The desired color of the menu screen or stop mode screen can be selected. R (Red), G (Green) and B (Blue) can be set individually. Each color can be adjusted within 21 levels.	BLACK	Adjustable
		PARENTAL	This lets you control what your children watch by blocking out undesirable material. This player lets you use Parental Lock if the disc has a parental code recorded on it. With Parental Lock capable discs, you can skip material you feel is inappropriate for your children. For details, refer to the instructions that come with the disc. Once you have input a secret 4-digit number, the viewing level (user restriction level) cannot be changed unless the same four numbers are input. Be sure not to forget your secret number. If you do forget it, return to the initial settings and input the secret number once more.	LEVEL 8	Level 1-8 Variable
		DVD LANG.	This lets you select the desired menu language when playing discs that feature menus in different languages.	English	Select the desired menu language.
		AUDIO	The audio language that you normally listen to can be selected from the various audio languages on a disc. Even when the audio language is changed during playback, the language selected at this setting will be selected when the disc is replaced.	English	Select from 136 different languages. Selection method is explained on page 29.
	LANG. SETUP	SUBTITLE	The subtitle language that you will normally display can be selected from the subtitles on a disc. Even when the subtitle language is changed during playback, the language selected at this setting will be selected when the disc is replaced.	English	Select from 136 different languages. Selection method is explained on page 29.
		AUTO LANG.	ON AUDIO and SUBTITLE can be set in advance. In the case of foreign movies, the original audio language and English subtitles will be automatically selected. In the case of English language movies, the original audio language (English) will be selected, and subtitles will not be displayed. On some discs, this function may not operate as described in the example. If AUDIO and SUBTITLE differ or DISPLAY and ASS.SUBTIT of the SUBTITLE sets OFF, the setting will be the same as OFF, changing settings during playback using "Selecting Languages" (page 37) and "Selecting Subtitle Language" (page 38) is possible. OFF Regular subtitle and audio settings will be as selected.	ON	OFF

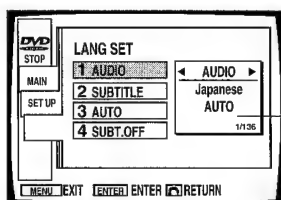
Item Settings

Class		Item	Details	Settings	
				Initial settings (factory settings at the time of shipment)	
INITIAL	LANG. SET UP	SUBT.OFF	The subtitle which is displayed by discs can be selected, when the subtitle is set to "OFF". S. SUBTITLE: The selected subtitle language will be selected. W. AUDIO: The selected audio language will be selected.	SEL SUBTL	WITH AUDIO
		ASPECT	When viewing software recorded in the wide mode, the image's height to width ratio can be switched to match the TV being used.	WIDE	PAN&SCAN LETTER BOX
OUTPUT		DIG. OUTPUT	This player lets you change the audio output via an optical digital output jack and PCM/  of the coaxial digital output jack. DVDs conform to both Dolby Digital (three-dimensional sound for movies etc.) and Linear PCM (digital sound with higher fidelity than CDs) audio standards. The DTS signal can also be output through audio switching.	PCM /DOLBY DIGITAL •DTS Automatically selects between Dolby Digital, DTS and linear PCM to match the audio signal. This is when using an amp with a Dolby Digital (AC-3) decoder or with a DTS decoder.	PCM Provides Linear PCM sound with both Dolby Digital and Linear PCM sources (when a regular amp or Dolby Pro logic amp is used). OFF Not output
		DOWN SAMP	96KHz: PCM audio discs with a 96kHz sampling frequency can be played back at the 96kHz high quality sound setting. 48kHz discs will be played back at 48kHz. 48kHz: Discs with a 96kHz sampling frequency can be played back at a compressed 48kHz with this setting. 48kHz discs will be played back at 48kHz. ● When the audio sampling frequency recorded on the disc is set as desired, output will also be switched between analog/digital output at the same time. ● Some 96KHz DVDs are copy protected. With this kind of disc, no signal is output from the digital output terminal.	96KHz	48KHz

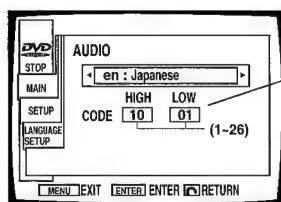
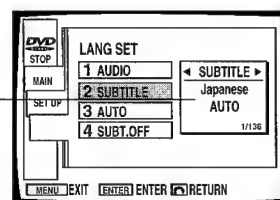
Returning changed settings to the initial settings (initialization)...

First make sure the power is turned off. With the power off, while pressing the  button, press the  button.

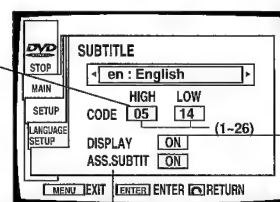
How to Set Basic Audio and Subtitles



Changes in order when the remote control's or button is pressed.



- When the auto setting is ON (page 28), because auto setting is given priority, the English audio and subtitles may differ from the language set for the basic audio and basic subtitles.



Referring to the input codes (high order, low order) on the following language code list, use the remote control's number buttons (For selection of numbers above 10, use the +10 button) to select the number that corresponds to the language that you want to select.

On some discs, subtitles that explain the scene condition have been recorded to assist hearing impaired persons. Display of these subtitles will have preference when the "ASS. SUBTIT" setting is set to ON.

After selecting this display with the remote control's or button, display ON and display OFF can be selected with the remote control's or button.

Language code list

Language	Language-code	Input-code (high-order)	Input-code (low-order)
Japanese	ja	10	01
English	en	05	14
French	fr	06	18
German	de	04	05
Italian	it	09	20
Spanish	es	05	19
Dutch	nl	14	12
Russian	ru	18	21
Chinese	zh	26	08
Korean	ko	11	15
Greek	el	05	12
Afar	aa	01	01
Abkhazian	ab	01	02
Afrikaans	af	01	06
Amharic	am	01	13
Arabic	ar	01	18
Assamese	as	01	19
Aymara	ay	01	25
Azerbaijani	az	01	26
Bashkir	ba	02	01
Belorussian	be	02	05
Bulgarian	bg	02	07
Bihari	bh	02	08
Bislama	bi	02	09
Bengali, Bangla	bn	02	14
Tibetan	bo	02	15

Language	Language-code	Input-code (high-order)	Input-code (low-order)
Breton	br	02	18
Catalan	ca	03	01
Corsican	co	03	15
Czech	cs	03	19
Welsh	cy	03	25
Danish	da	04	01
Bhutani	dz	04	26
Esperanto	eo	05	15
Estonian	et	05	20
Basque	eu	05	21
Persian	fa	06	01
Finnish	fi	06	09
Fiji	fj	06	10
Faroese	fo	06	15
Frisian	fy	06	25
Irish	ga	07	01
Scottish Gaelic	gd	07	04
Galician	gl	07	12
Guarani	gn	07	14
Gujarati	gu	07	21
Hausa	ha	08	01
Hindi	hi	08	09
Croatian	hr	08	18
Hungarian	hu	08	21
Armenian	hy	08	25
Interlingua	ia	09	01

How to Set Basic Audio and Subtitles

Language	Language-code	Input-code (high-order)	Input-code (low-order)
Interlingue	ie	09	05
Inupiak	ik	09	11
Indonesian	in	09	14
Icelandic	is	09	19
Hebrew	iw	09	23
Yiddish	ji	10	09
Javanese	jw	10	23
Georgian	ka	11	01
Kazakh	kk	11	11
Greenlandic	kl	11	12
Cambodian	km	11	13
Kannada	kn	11	14
Kashmiri	ks	11	19
Kurdish	ku	11	21
Kirghiz	ky	11	25
Latin	la	12	01
Lingala	ln	12	14
Laotian	lo	12	05
Lithuanian	lt	12	20
Latvian, Lettish	lv	12	22
Malagasy	mg	13	07
Maori	mi	13	09
Macedonian	mk	13	11
Malayalam	ml	13	12
Mongolian	mn	13	14
Moldavian	mo	13	15
Marathi	mr	13	18
Malay	ms	13	19
Maltese	mt	13	20
Burmese	my	13	25
Nauru	na	14	01
Nepali	ne	14	05
Norwegian	no	14	15
Occitan	oc	15	03
(Afan) Oromo	om	15	13
Oriya	or	15	18
Panjabi	pa	16	01
Polish	pl	16	12
Pashto, Pushto	ps	16	19
Portuguese	pt	16	20
Quechua	qu	17	21
Rhaeto-Romance	rm	18	13
Kirundi	rn	18	14

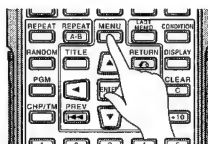
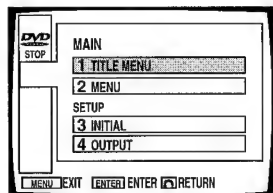
Language	Language-code	Input-code (high-order)	Input-code (low-order)
Rumanian	ro	18	15
Kinyarwanda	rw	18	23
Sanskrit	sa	19	01
Sindhi	sd	19	04
Sango	sg	19	07
Serbo-Croatian	sh	19	08
Singhalese	si	19	09
Slovak	sk	19	11
Slovenian	sl	19	12
Samoan	sm	19	13
Shona	sn	19	14
Somali	so	19	15
Albanian	sq	19	17
Serbian	sr	19	18
Siswati	ss	19	19
Sesotho	st	19	20
Sundanese	su	19	21
Swedish	sv	19	22
Swahili	sw	19	23
Tamil	ta	20	01
Telugu	te	20	05
Tajik	tg	20	07
Thai	th	20	08
Tigrinya	ti	20	09
Turkmen	tk	20	11
Tagalog	tl	20	12
Setswana	tn	20	14
Tongan	to	20	15
Turkish	tr	20	18
Tsonga	ts	20	19
Tatar	tt	20	20
Twi	tw	20	23
Ukrainian	uk	21	11
Urdu	ur	21	18
Uzbek	uz	21	26
Vietnamese	vi	22	09
Volapük	vo	22	15
Wolof	wo	23	15
Xhosa	xh	24	08
Yoruba	yo	25	15
Zulu	zu	26	21



Aspect Ratio Setting for Wide Screen TV Software

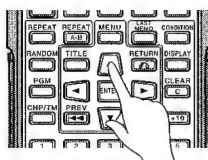
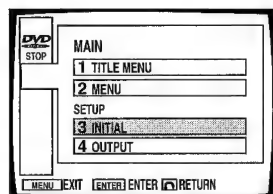
Certain DVDs feature image data recorded with the "squeeze" recording system for wide screen viewing. When watching this kind of DVD on a conventional TV, the picture may appear vertically squeezed. If this occurs, you can use the Aspect Ratio function to achieve a normal picture.

1. Press during stop.



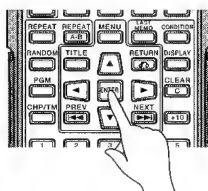
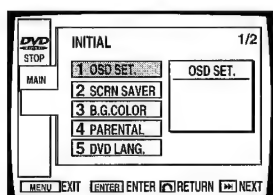
- The set-up menu is displayed.

2. Select initial set-up with .



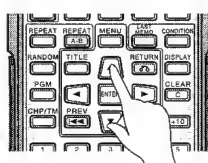
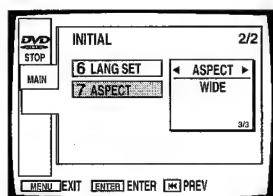
- The initial set-up button will be displayed in blue.

3. Press .



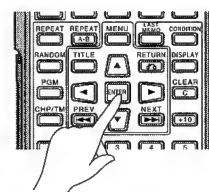
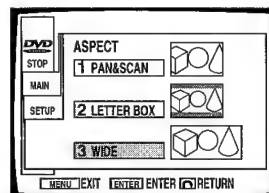
- The initial set-up screen will be displayed.

4. Select ASPECT using buttons.

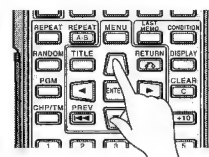
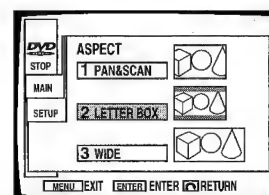


- Pressing and holding the button will display the next page's screen shown above.

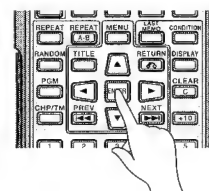
5. Press .



6. Select the desired mode (PAN & SCAN, LETTER BOX, WIDE) with the buttons.



7. Press .




- The picture changes to the desired type.



For DVDs where aspect switching is possible, select the aspect that matches the TV.

Disc	Aspect selection	Wide TV (16:9)	Regular TV (4:3)
(16:9)	Wide		
	Pan & scan		
	Letter box		
(4:3)			

When the above chart's  is selected, the picture with the correct height to width ratio will be selected. Whether aspect can be switched or not depends on the disc. Please refer to the information written on the disc's jacket etc.

For discs where aspect selection is not possible, make the screen adjustment using the TV's controls.

Note

- ◆ When there is a power outage or you disconnect the player from the wall outlet while the power is ON, settings are cleared. If you do disconnect the power cord, be sure to turn the display window's "– OFF –" display off with the player's POWER button or the remote control's power button.
- ◆ If "COND.MEM." is set for a DVD, this setting may not function. (refer to page 36)

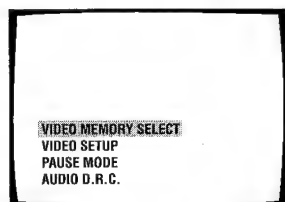
Tips

- The width-to-height ratio of conventional TVs is 4:3, while the width-to-height ratio of wide screen TVs is 16:9. This width-to-height ratio is called the aspect ratio.

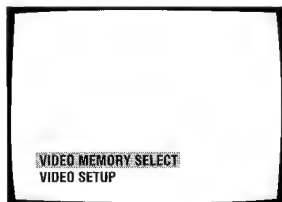
Changing Picture and Sound Quality.

1. Press to display the following screen.

When a DVD is used



When a Video CD is used



2. After selecting with , press



Picture selection: VIDEO MEMORY SELECT (See below)

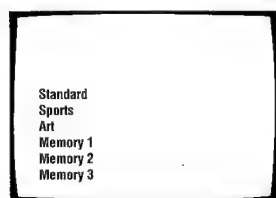
: VIDEO SETUP: (See below)

Still picture selection: PAUSE MODE (See next page)

Audio selection : AUDIO D.R.C. (See next page)

Picture selection (VIDEO MEMORY SELECT/VIDEO SETUP)

When VIDEO MEMORY SELECT was selected



After selecting with , press .

STANDARD: Standard picture quality.

SPORTS: Picture quality suitable for sports programs.

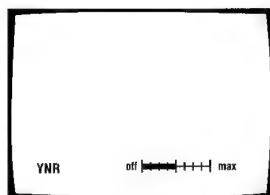
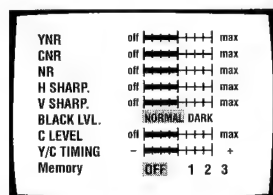
ART: Picture quality with abundant expressive power.

MEMORY 1 to 3: For recalling picture adjustment settings set in the following section.

Note

- ◆ In some cases neither of the above modes will have been selected. This indicates that there have been changes to video settings. The display automatically disappears when left for 5 seconds.

When VIDEO SETUP (picture adjustment) was selected



5 seconds later

Note

- ◆ When left for 5 seconds, the complete mode display will be replaced by the first item's display. After 25 seconds, this screen will disappear. To display the complete mode display when the first item's screen is displayed, press .
- ◆ The C LEVEL adjustment does not function for component signals.
- ◆ C LEVEL adjustment will have no effect for some TVs such as commercial monitors.

Select with and adjust with .

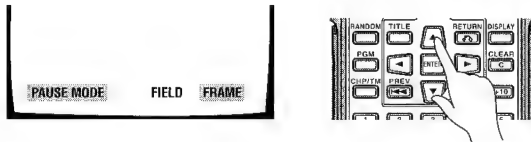
- YNR: For adjustment of brightness (Y) signal NR.
- CNR: For adjustment of color signal NR.
- NR: For reduction of video signal noise.
- H SHARP: For adjustment of sharpness in horizontal direction.
- V SHARP: For adjustment of sharpness in vertical direction.
- BLACK LVL.: For correction of floating black color and for reproduction of sharp 3 dimensional pictures.
- C LEVEL: For adjustment of colour depth. Effective for colorful images such as those used in animation.
- Y/C TIMING: For adjustment of colour mis-alignment that occurs during the software production process. The brightness and color difference signals are synchronized, reproducing the DVD's beautiful natural images.
- Memory: For memorization of picture settings. Pressing after selection of either 1, 2 or 3 memorizes the setting.

(Continued from top of previous page)

Changing the still picture condition (PAUSE MODE)

There may be picture shake during the still picture mode. In this case, setting the pause mode to the field mode will eliminate the problem.

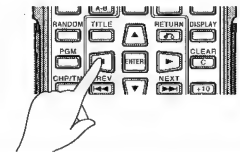
When the pause mode was selected



After selecting FIELD or FRAME with the

◀ ▶ buttons, press .

Changes each time pressed.

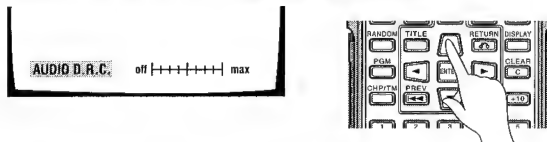


Changing the sound quality (AUDIO D.R.C.)

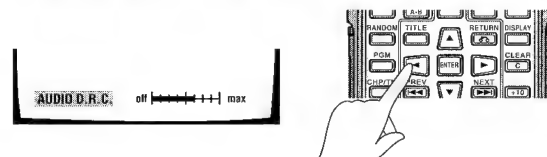
AUDIO D.R.C. stands for Audio Dynamic Range Compression. DVDs provide sound with wide dynamic range. Set the AUDIO D.R.C., if you find dialog or other sounds hard to hear when listening on your stereo system or TV.

- AUDIO D.R.C. only functions for discs that have been recorded with Dolby Digital (AC-3).

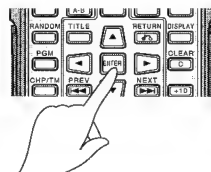
When AUDIO D.R.C. was selected



1. Adjust with the ◀ ▶ buttons.



2. Press .



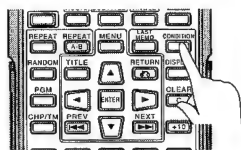


Memorizing Settings for Often Viewed DVDs (Condition Memory)

You can memorize details for the following four settings.
Once memorized, Condition Memory will automatically recall the settings.

Aspect Ratio (page 32)
Multi-language (page 37)
Multi-language subtitles (page 38)
Position (page 28)

Press  during playback.



- "COND. MEM." will appear on the TV screen.

Note


- ◆ When there is a power outage or you disconnect the player from the wall outlet while the power is ON, settings are cleared. If you do disconnect the power cord, be sure to turn the display window's "– OFF –" display off with the player's POWER button or the remote control's power button.

You can store settings for DVDs you often watch in memory. Settings remain in memory even if you remove the disc from the player, or switch power to the player OFF. If you load a disc that has its settings memorized, the Condition indicator lights. When you start playing the disc, the memorized settings are automatically recalled.


When a disc that has memorized settings is loaded...

"COND. MEM." will appear on the screen, and the previously memorized settings will be selected.

Erasing the recorded contents

Load the disc that has memorized settings, and press the  button during "COND. MEM." has been displayed,. The disc's recorded data will be erased.



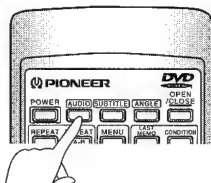
- Settings are stored in memory for use any time.
- You can store settings for up to 30 DVDs in memory. If you memorize settings for more than 30 DVDs, previously memorized settings are erased in order from the least recently memorized settings. After that, if you try to call up these previously memorized settings, you will get the latest settings that have taken their place.
- To make changes to Aspect ratio, subtitle language, and language settings, press  during playback.
- Switching of the multi-audio mode etc., is automatic on some discs.




Selecting Languages (Multi-Language)

Dolby Digital, PCM, and other audio data is recorded on DVDs in a number of languages, letting you choose the desired language.


- 1.** Press  during playback.



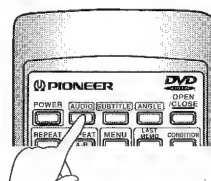
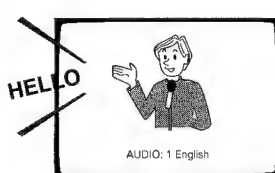
Tips

- For some titles, selection can be made using the menu. In this case press the  button while the indicator is displayed, display the menu screen and make your selection.

Note

- Audio recorded with DTS signals will not be output. DTS audio will only be output from the DIGITAL OUT jacks. In this case, please use this unit in combination with a DTS compatible amp or receiver. (Refer to page 8.)
- You cannot switch languages if there is only one language recorded on the disc.
- Switching the audio language may not be possible with some titles. In this case, the  mark will be displayed. As audio numbers and language settings differ depending on the disc, please refer to the disc's instruction manual for details.
- If "COND.MEM." is set for a DVD, this setting may not function. (refer to page 36.)

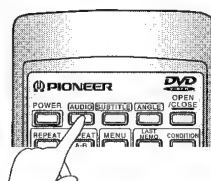
- 2.** Press  to select the desired language.



Sound During Playback

Changing Audio Type

- 1.** Press  during playback.



- Audio type changes each time you press the button.

Tips

- With karaoke and other software, set the appropriate audio type for singing and accompaniment after referring to information on the disc jacket or accompanying material.



Selecting a Subtitle Language (Multi-Language Subtitles)

You can select a desired subtitle language with DVDs that have subtitle data in multiple languages recorded on them.

- 1.** Press during playback.



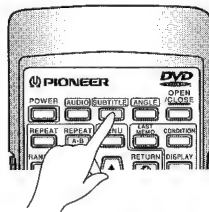
Note

- ◆ The subtitle language can not be switched if the subtitle language is not recorded, or if only one language is recorded.
- ◆ Switching the subtitle language may not be possible with some titles. In this case, the mark will be displayed.
- ◆ If "COND.MEM." is set for a DVD, this setting may not function. (refer to page 36.)



- To clear subtitles during playback, press after first pressing . You can also clear subtitles by selecting OFF in the subtitle menu display.
- Subtitles can be cleared by selecting LAN. SETUP from the INITIAL menu, and setting SUBTITLE to "OFF" (refer to pages 26 and 27).
- For some titles, selection can be made using the menu. In this case press the while the indicator is displayed, display the menu screen and make your selection.

- 2.** Press to select the desired language.



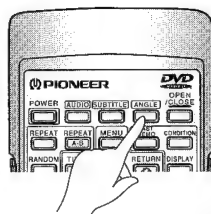
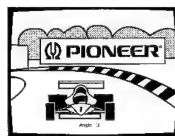
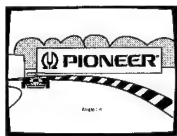
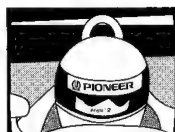
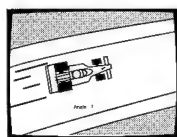
- You can also make your selection from a menu.



Viewing from a Desired Camera Angle (Multi-Angle)

With DVDs featuring recordings of images shot from different angles, you can choose a desired viewing angle.

- 1.** Press during playback.



- The camera angle changes each time you press the button.

To check whether or not the disc is recorded with angles:

The jacket of discs that are recorded with angles will be marked with . Also, on this unit, when locations on discs that are recorded with angles are played back, the mark can be displayed.

To deactivate the Angle mark

1. Press during the stop mode.
2. Press the number button.
 - The initial set-up menu will appear.
3. Press the number button.
 - The OSD SETUP screen will appear.
4. Press the number button.
 - The ANGLE menu will appear.
5. Press the number button. Menu setup is finished.

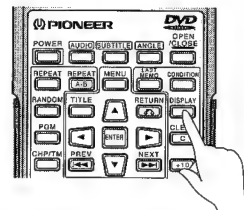
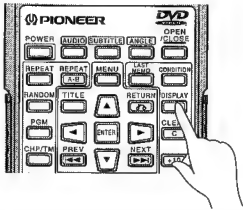


- You can use the Multi-Angle function only with discs featuring recordings of images shot from different camera angles.
- During Multi-Angle playback, the Angle indicator on the player lights.
- For some titles, selection can be made using the menu. In this case press the while the indicator is displayed, display the menu screen and make your selection.

Viewing Disc Information

Press  during playback.

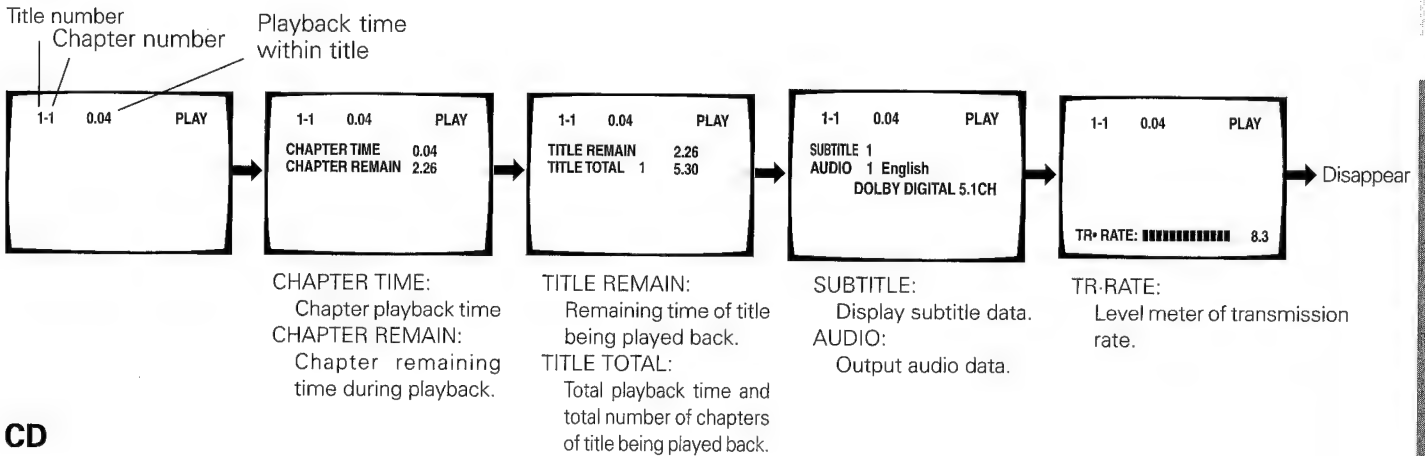
Press  in the STOP mode.



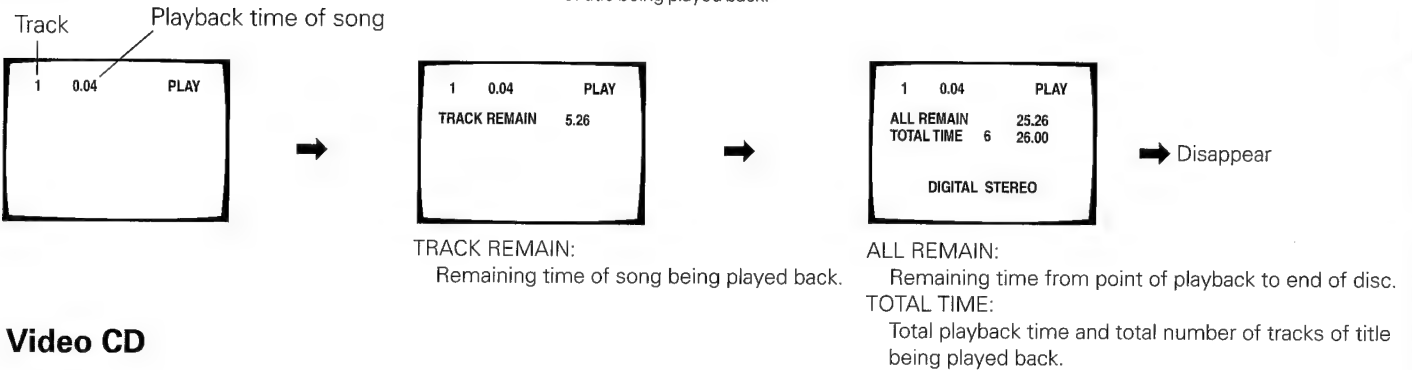
- The display will change as follows each time the button is pressed.
Some displays may not be displayed depending on the title.

- Disc information is displayed.

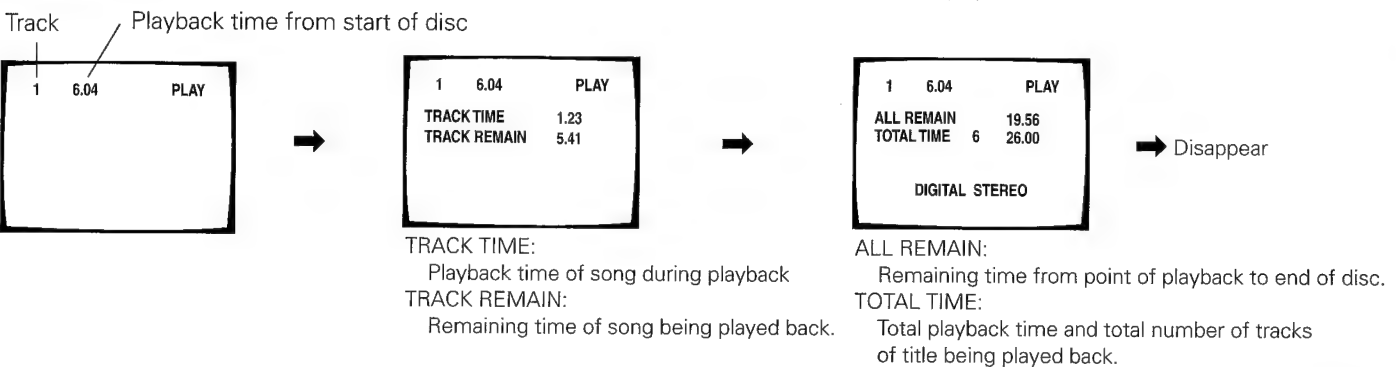
DVD



CD

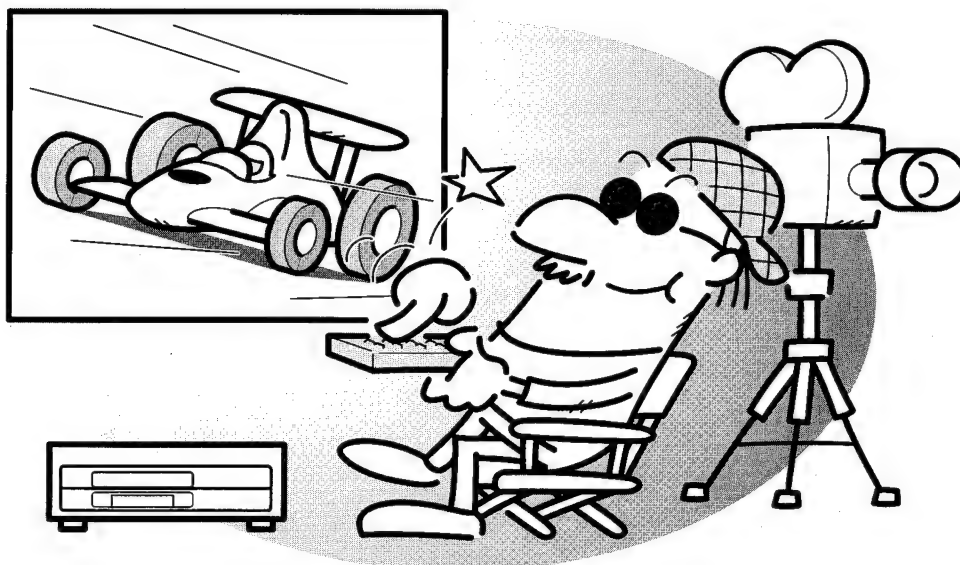


Video CD



Detailed Operation

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Playback By Menu Selection

DVDs and Video CDs, depending on the disc, feature selection menus. This player lets you choose a desired title or track by selecting from a menu.

Selection and playback from a menu

① Press .

- A menu is displayed. This menu is recorded on the disc. Menus differ depending on the disc.
- With Video CDs that have Play Back Control, PBC is indicated in the display window.



② For example, to select ② JAZZ, press the ② number button.

- When selecting a number higher than 10, use the button.
- When selecting 10, press → .
- When selecting 17, press → .
- When selecting 20, press → → .
- The selected title or track starts playing.
- With DVDs, you can also select numbers with the and buttons and then press .

Tips

- Menu details differ depending on the disc. Play a disc by making menu selections using the direction buttons and the number buttons.
- You can also play Video CDs without calling up a menu by pressing a number button during STOP. For example, to start playback from track 1, press the .
- For some titles, selection can be made using the menu. In this case press the while the indicator is displayed, display the menu screen and make your selection.

Returning to menu display during playback

During DVD playback

① Press .

② Press .

- Press again for a menu of title contents.
- Operate according to disc menus.

During Video CD playback

Press .

Pressing the during PBC playback will display the menu. With PBC playback, because the player's operation method and functions depend on the PBC signal recorded on the disc, they will differ according to the disc. For details, please refer to the disc's instruction manual.

Note

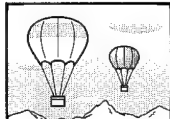
- ◆ When using a menu for Video CD playback; Program, Random, Repeat Play and Track/Time Search functions do not operate.
- ◆ With DVDs, menus may not be displayed in some cases.
- ◆ When the PBC ON mode is engaged during Video CD playback, operation of this player will vary depending on the disc. For details, please refer to the disc's operation manual.



Title 1



Title 2



Searching for a Desired Video Scene (Title Search)

Direct search with title numbers

- ① Press **TITLE** during playback.
(During the stop mode, proceed to step 2 without pressing the **TITLE** button.)

TITLE 1

- Title numbers flash on screen.

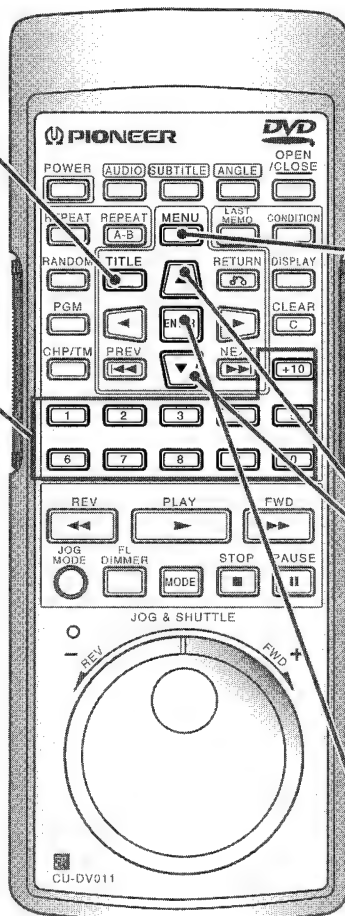
- ② Selecting title numbers directly with the number buttons.

- When selecting title number 3, press **3**.

TITLE 3

- When selecting title number 10, press **+10** → **0**.

- Pressing and holding the **TITLE** button while the TITLE number is flashing will advance the TITLE number one by one. Selection can be made by selecting the desired number and pressing the **PLAY** button.

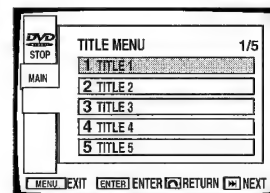


Searching with the menu

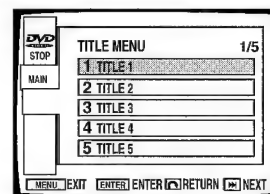
- ① Press **TITLE**.

(If the stop mode is engaged, proceed to step 3.)

- ② During playback, proceed to step **MENU**.



- ③ Select a title number using the **UP** **DOWN** buttons.



- ④ Press **ENTER**.

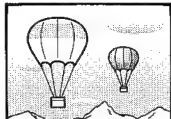
- Playback of the selected title starts.

Note

- ◆ You cannot play back successive titles.
- ◆ To play back multiple successive titles, program the titles and then perform Program playback. (Page 45)
- ◆ With certain DVDs, the search operation may stop. In this case, the mark is displayed.
- ◆ Menus may not be displayed on some discs.

Tips

- Direct selection is also possible using the number buttons. The selected title will be playback immediately.
- For some titles, selection can be made using the menu. In this case press the **MENU** button while the indicator is displayed, display the menu screen and make your selection.



Searching for a Desired Video Scene/Audio Track (Chapter/Track/Time Search)

There are 3 search functions available for DVD discs: Normal search, Direct search and Time search. For CDs and Video CDs, Direct search is possible.

Searching by chapter/track number.

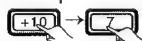
Direct search using number buttons.

Example 1: To select chapter/track number 3



CHP 3

Example 2: To select chapter/track number 17



CHP 17

- During the stop mode on a DVD, use the "Searching For a desired Video Scene"

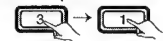
When the chapter/track number is large

① Press .

- Chapter/track numbers flash on screen.
- On DVDs, the menu may be displayed during the stop mode. In this case, please refer "Chapter Number Search with the menu" on the right.

② Select chapter numbers directly with the number buttons.

Example 1: To select chapter/track number 31




Example 2: To select chapter number 187



③ Press .

- Playback of the selected chapter/track starts.

Note

- ◆ Time search is not possible with CDs.
- ◆ With DVDs, Time search may be possible with certain titles. In this case, the  mark is displayed.
- ◆ When performing DVD Time Search, playback may start from a slightly different time than that specified.
- ◆ On DVDs, Time search is not possible during the stop mode.
- ◆ Search using the above operation is not possible during PBC playback of Video CDs.

Chapter Number Search with the menu

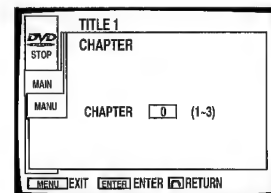
This operation is for DVDs only.

① Press .

- If the stop mode is engaged, proceed to step 3.

② Press .

- Chapter menu is displayed.



③ Selection according to screen displays.

- Depending on the title, the menu may not be displayed. In this case, please refer to the method on the left.

Searching by time number (Time search)

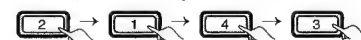
④ Press twice to.

CHP 0 → TIME 0.00

- With DVDs that do not have chapters, pressing the button once will display the time.

⑤ Select the desired time number with the number buttons.

Example 1: To select 21 minutes 43 seconds





TIME 21.43

- You cannot search for chapters that overlap titles. You can only search for chapters within the same title.

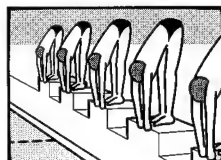
⑥ Press .

- Playback starts from the selected elapsed play time.

Tips

- To clear Title, Chapter, and Time indications when they are flashing, press the  button twice.
- For some titles, selection can be made using the menu. In this case press the  button while the indicator is displayed, display the menu screen and make your selection.

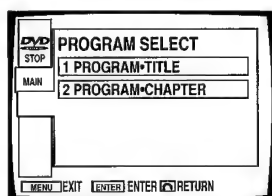
Playback in a Desired Order (Program Play)



Programming (DVD)

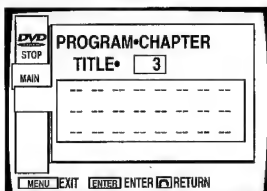
① Press .

② Select the program type with the number buttons.



③ When chapter programming was selected, first press the to move to TITLE, then use the number buttons to select the title that contains the chapter to be programmed.

● Follow procedure 4 to select a title.

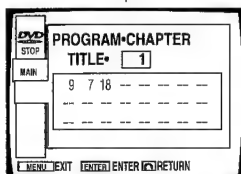
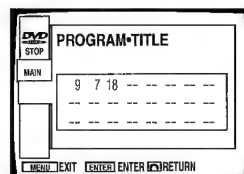


④ Programming DVD titles/chapters 9, 7, and 18 in order.

→ → →

DVD title

DVD chapter



⑤ Press .

● Playback starts in the set order.

Tips

- You can program up to 24 steps.
- If you press the wrong number button, press and then press the correct number button.
- Program play is not possible with discs that have no chapter numbers recorded on them. With DVDs, the mark will appear on the title screen.
- Pressing during programming: If you press instead of a number button, is displayed indicating that a pause has been programmed.

Program setting (Video CDs, CDs)

① Press .

② Programming tracks 9, 7, and 18 in order.

→ → →

Press the number buttons in order.

③ Press .

● Playback starts in the specified track order.

Confirmation, addition or cancellation of programs

① Press the .

② In the case of a DVD, press the number buttons to select the program type, and then press .

● Confirmation can be made with the above procedure.

③ To add to the program, select the song with the number buttons and then press .

● Program additions can be made with the above procedure.

④ To cancel the program, select the song with the buttons, and then press the button.

● The complete program will be canceled, even when the disc table is open.

Stopping program play

Press .

● Program play stops.

Note

- You cannot program when playing a Video CD using menu selections (during PBC).
- When moving chapters, chapter not programmed may appear on screen, but this is not a malfunction.
- Programming may not be possible with certain DVD discs. On these types of discs, the mark will appear on the screen when programming is attempted.
- Only chapters within the same title can be programmed during chapter programming.
- You cannot program a pause as the first step or last step.



Repeat Play

Repeat play of a chapter/track

Press **REPEAT** once during playback of the chapter or track you want to repeat.

Repeat play of a title

Press **REPEAT** twice during playback of the title you want to repeat.

- With DVDs, the title continues playing until the end, and then playback starts once more from the beginning of that title.
- With CDs and Video CDs, a disc is title, so the entire disc is repeated.

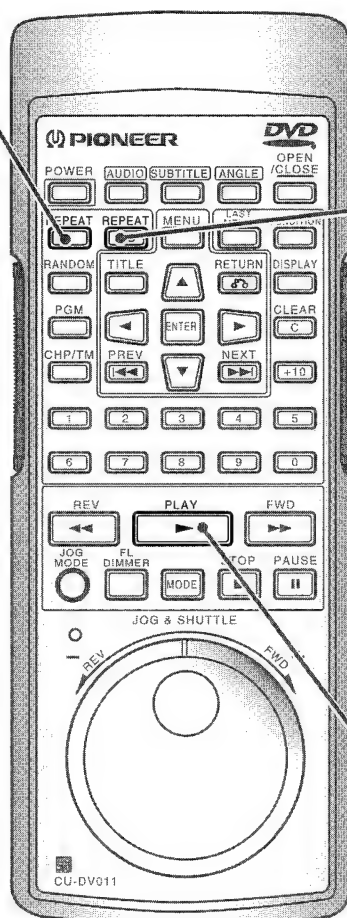
Repeat play of a specified section

Press **REPEAT A-B** at the beginning and end of the section you want to repeat.

Return to a specified location

- 1 Press **REPEAT A-B** at the desired location.
- 2 When you want to return, press **PLAY**.

- Press **CLEAR C** to clear a specified location.

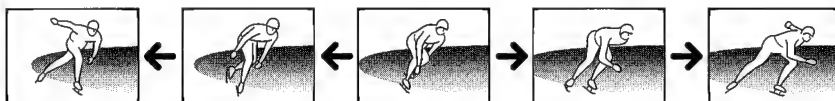


Tips

- Press the **REPEAT** button during program playback to repeat playback of the program.
- Press **CLEAR C** to cancel Repeat play. The Repeat play mode is canceled, but playback continues.
- With DVDs, repeat playback between titles is not possible.

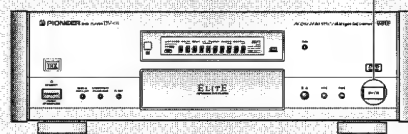
Note

- ◆ With some DVD discs, there may be times when Repeat playback is not possible because of the title. In this case, the mark will appear on the screen.
- ◆ With Video CDs, Repeat play is not possible during playback with the menu displayed (PBC playback). To perform Repeat play, start playback without displaying a menu (refer to page 42), and press **REPEAT**.



Still Frame/Slow Play/Frame Advance

▶/|| button



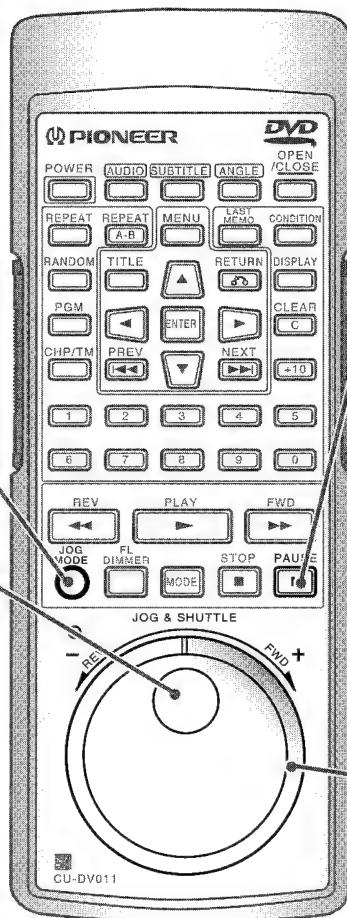
Frame advancement: Viewing the picture one frame at a time

① Press .

- The jog mode indicator will light.

② Turn slowly.

- FWD → : The picture will be advanced by one frame each time the dial is turned.
REV → : The picture will be backed up by one frame each time the dial is turned.
- The still picture mode will be engaged when you stop turning the dial.
 - Depending on the speed that the jog dial is turned, slow playback is possible. (Possible only while the jog dial is being turned.)



Viewing a still frame

Press .

- Press the ▶/|| button on the front of the player.
- If the still picture shakes on a DVD, refer to page 34, 35 and select the "FIELD" setting.

Slow playback: Viewing the picture at slow speed

① Press the button.

- On the front panel, press the ▶/|| button.

② Turn the shuttle ring.

FWD → : Slow playback speed can be adjusted between 4 levels (1/16, 1/8, 1/4 and 1/2) according to the angle that the ring is turned.

REV → : Slow playback speed can be adjusted between 2 levels (slow 1, slow 2) according to the angle that the ring is turned. (Does not function with Video CDs.)

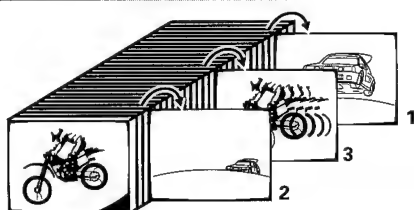
- The selected slow playback speed is maintained even when the shuttle ring is released.

Note

- ◆ There is no sound when viewing still frames, Slow playback or when advancing one frame at a time.
- ◆ Pause may not be possible with certain discs. In this case, the mark is displayed.
- ◆ Frame advancement in the reverse direction is not as smooth as frame advancement in the forward direction. This is because of the disc's recording format (MPEG).
- ◆ Smooth slow playback is not possible with some Video CDs. Also, slow playback in the reverse direction is not possible.

Tips

- To return to normal playback, press (or the ▶/|| button on the player).



Random Play

On DVDs....

Random playback of chapters within one title

Press once, then press .

- "RANDOM CHP" will appear on the screen, and chapters within the title will be played back in a random order.

Random playback of titles

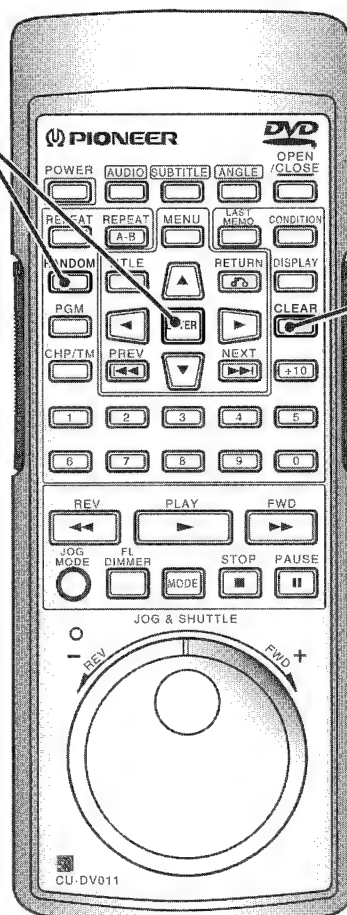
Press twice, then press .

- "RANDOM TITLE" will appear on the screen, and titles will be played back in a random order.

Stopping random play

Press .

- This returns you to normal playback of chapters/tracks in order from the chapter/track currently playing.



On CDs, Video CDs....

Random playback

Press .

- "RANDOM" will appear on the screen, and random playback will begin.

During Random play:

- Press , and the player's next selection starts playing.
- Press , and playback of the current selection starts again from the beginning.

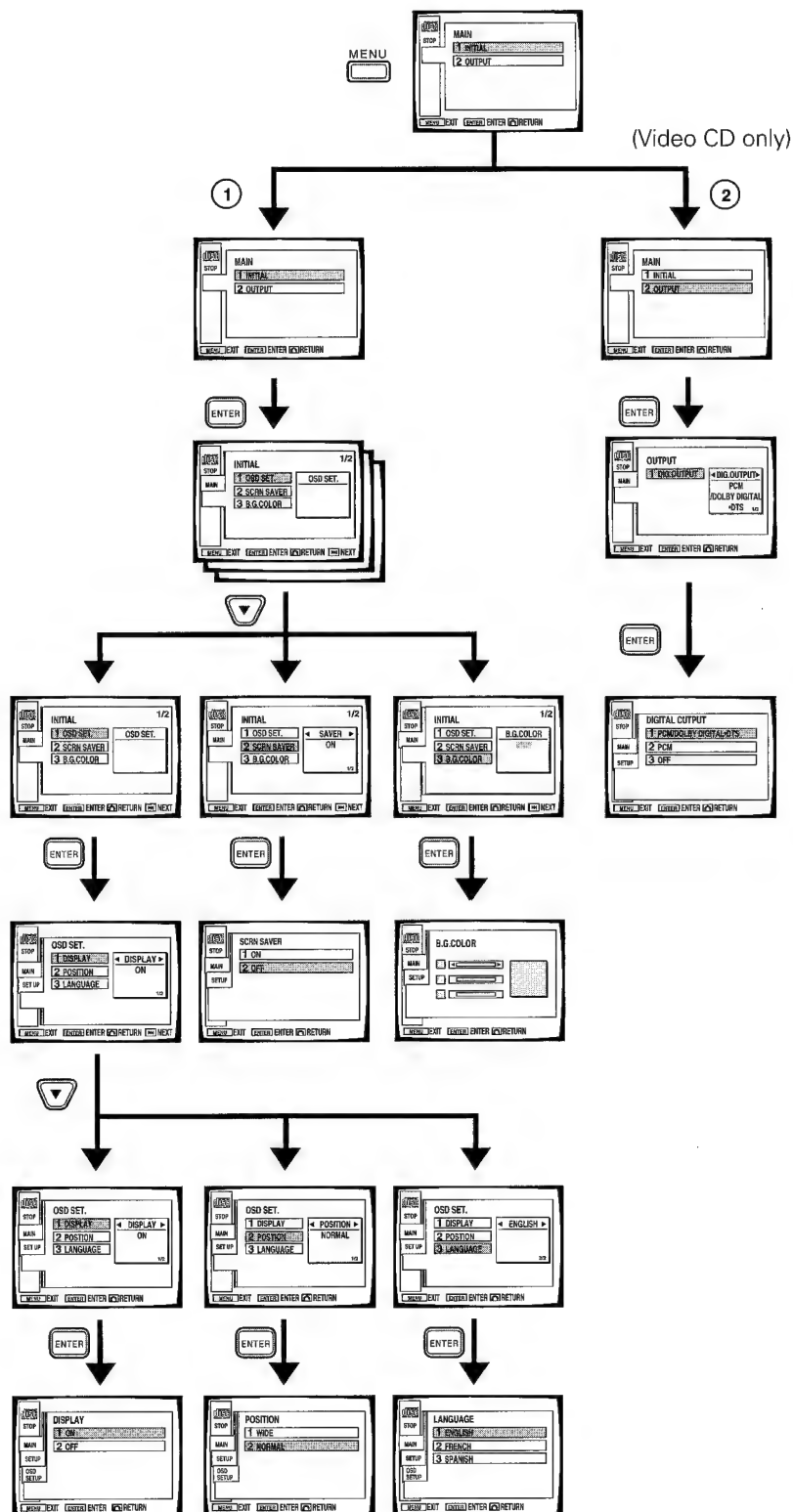
Note

- ◆ With Video CDs, Random play is not possible during playback with the menu displayed (PBC playback). To perform Random play, start playback without displaying a menu (refer to page 42), and press .
- ◆ Random play of programmed chapters/tracks is not possible.
- ◆ In the case of DVDs, random playback may not be possible with some titles. In this case, the mark will appear on the screen.
- ◆ Repeat playback of random playback is not possible.

Outline of GUI (Graphical User Interface) Operation

On this player, various settings can be selected while watching menu screens and using the remote control unit. Here we will explain how to access menu screens. Because menu screen access differs according to the type of disc being used, or the playback mode (stop mode etc.), refer to the following menu map when accessing.

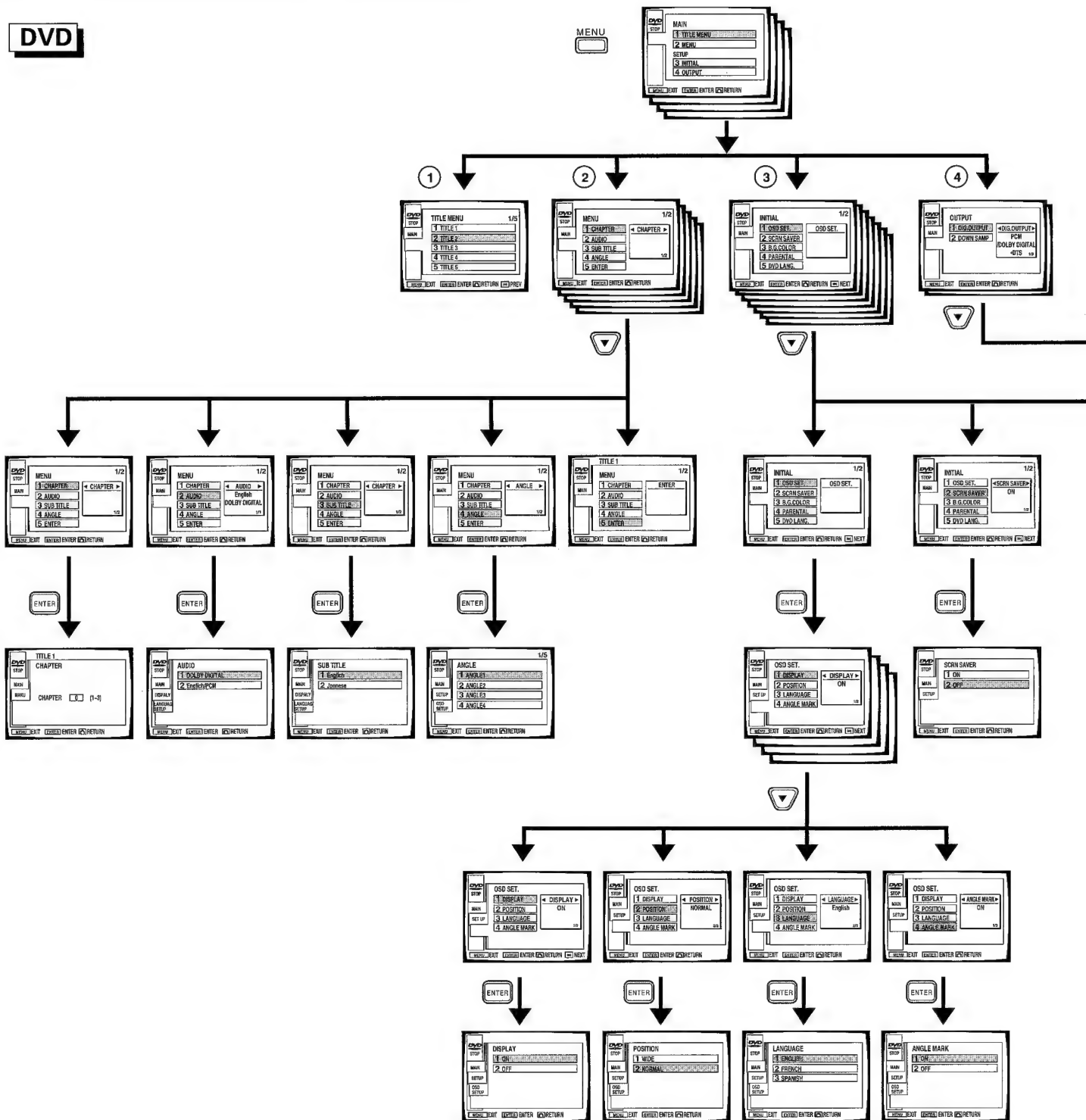
CD, Video CD



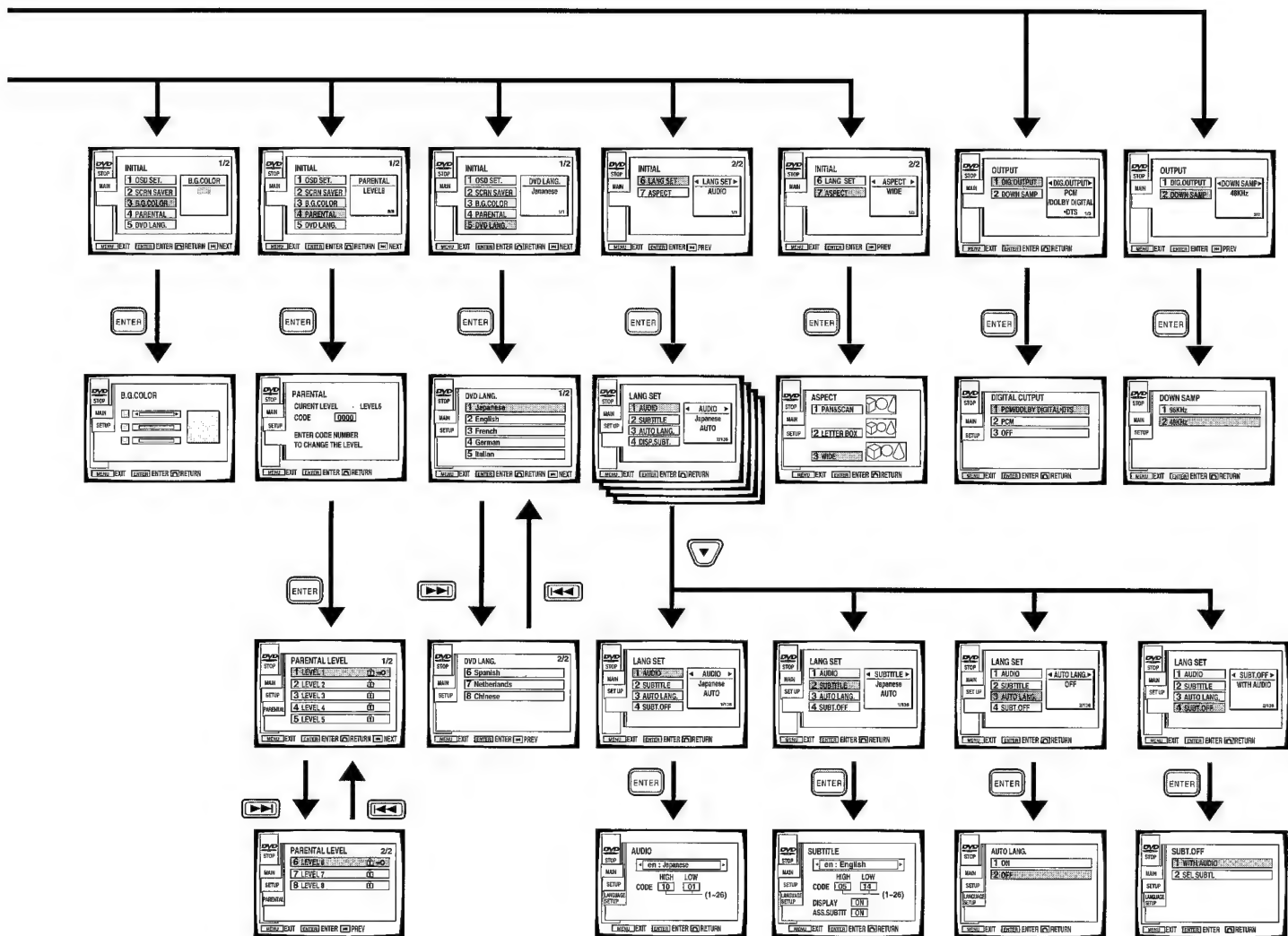
Outline of GUI (Graphical User Interface) Operation

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Press the **RETURN** button to return to the screen that was displayed before **ENTER** was pressed.





Other Information

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Troubleshooting

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Inspect the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

	Symptom	Possible causes	Reference page
Operation	1.The disc comes back out even when the disc table is closed.	<ul style="list-style-type: none"> ● The disc is dirty or warped. ● The disc is not placed properly on the disc table. ● Region No. does not conform with this unit. 	p.56 p.15 p.15
	2.Playback is not possible.	<ul style="list-style-type: none"> ● Condensation has formed inside the player. ● This player cannot play PAL and SECAM format DVD discs. 	
	3.Picture disturbance during playback.	<ul style="list-style-type: none"> ● This player is compatible with Macro-Vision System copy guard. Some discs include a copy prevention signal, and when this type of disc is played back, stripes etc., may appear on some sections of the picture depending on the TV. (This is not a malfunction.) 	
	4.When recorded on a VCR there is disturbance in the playback picture.	<ul style="list-style-type: none"> ● This player is compatible with analog copy protect technology copy guard. Some discs include a copy prevention signal and the copy guard system will prevent proper playback. 	
	5.  mark appears on screen.	<ul style="list-style-type: none"> ● The selected function does not operate for that disc. 	
	6.Picture playback stops and the operation button can not be used.	<ul style="list-style-type: none"> ● First stop the disc (press the  button), then start playback again. 	
	7.Setting are unexpectedly cleared.	<ul style="list-style-type: none"> ● Make sure player is not plugged into a switched outlet. 	
Remote control	8.Remote control operation is not possible.	<ul style="list-style-type: none"> ● The rear panel control input jacks on the player is being used. ● The remote control is too far from the player, or the angle with the remote sensor is too sharp. ● The batteries are exhausted. 	p.14
	9.Improper operation of TV set, etc., occurs.	<ul style="list-style-type: none"> ● Some TVs that have wireless remote control functions may not operate properly with this remote control. 	
Audio	10. Audio is not output or is distorted.	<ul style="list-style-type: none"> ● When DTS audio is selected on DVDs that have been recorded with DTS audio, output will be from the DIGITAL OUT jacks only; audio will not be output from AUDIO OUT jacks. To output audio from these jacks, please select another audio mode. ● On CDs that have been recorded with DTS audio, there may be noise output from AUDIO OUT jacks, please use the DIGITAL OUT jacks. ● The digital output setting is set to 96KHz. ● Digital output is prohibited for some discs. ● The connection plugs are not inserted fully into the terminals or are not connected. ● The connection plug or terminal is dirty. ● Audio cable connection is wrong. ● Connection is made to the stereo amplifier's PHONO input terminal. ● The pause mode is engaged. ● Stereo amplifier operation is wrong. (Check input (CD, AUX etc.) selector) 	p.7
	11. Noticeable difference in DVD and CD volume.	<ul style="list-style-type: none"> ● Although you may notice a difference in volume between CDs and DVDs, this is the result of a difference in disc recording methods. 	

Caution

- Abnormal functioning of this unit may be caused by static electricity, or other external interference. To restore normal operation, unplug the AC power cord and then plug it in again.
- If the AC power cord is disconnected while the player is playing, the settings set by MODE, CONDITION and LAST MEMO will revert back to values stored before playing.

For Proper and Long Use

■ DO NOT MOVE THE UNIT DURING PLAYBACK

During playback, the disc rotates at high speed. Do NOT lift or move the unit during playback. Doing so may damage the disc.

■ WHEN MOVING THE UNIT

When changing places of installation or packing the unit for moving, be sure to remove the disc and return the disc table to its original position in the player. Then, switch the power OFF. **Check that the “-OFF-” indication on the display goes off**, then disconnect the power cord.

■ INSTALLATION

- Select a stable place to the side of a TV set or stereo system to be connected to the unit.
- When using the unit with a stereo system, install the speakers a little bit away from the TV.
- Do NOT install the unit on top of a TV or color monitor. Install the unit away from equipment that may be affected by magnetism, such as a cassette deck.

■ AVOID INSTALLING IN A PLACE THAT IS:

- Exposed to direct sunlight
- Exposed to humidity or where ventilation is poor
- Extremely hot or cold
- Exposed to vibration
- Exposed to dust
- Exposed to oily smoke, steam or heat (for example, a kitchen)

■ DO NOT PLACE AN OBJECT ON TOP

Do NOT place an object on the unit.

■ DO NOT BLOCK VENTS

Do NOT use the player on top of a long-fibered carpet, bed or sofa, and do not cover it with a cloth etc.. This will prevent heat radiation and could result in damage.

■ AVOID HEAT

Do NOT place the unit on equipment generating heat, such as an amplifier.

When installing the unit in a rack, place it on the lowest shelf possible (however, not where it is exposed to dust) and separated from the amplifier to avoid the heat generated by the amplifier or other audio equipment.

■ CAUTION: WHEN PLACING THE UNIT IN A STEREO RACK WITH GLASS DOORS

Be sure there is ample space between the unit and the glass doors when opening the disc table using the remote control. If the disc table opens against strong resistance, **such as a closed glass door**, damage to the unit may result.

■ CONDENSATION

Moisture will form in the operating section of the player if the player is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, player's performance will be impaired.

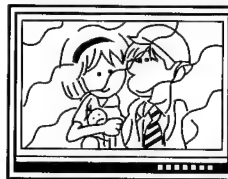
To prevent this, let the player stand in its new surroundings for about an hour before switching it on, or make sure that the room temperature rises gradually.

Condensation may also form during the summer if the player is exposed to the breeze from an air conditioner. In such cases, change the location of the player.



■ SWITCH THE POWER OFF WHENEVER NOT USING THE UNIT

Depending on the strength of the TV or radio broadcast signal, having the TV or radio set on while the power of the unit is ON may produce stripes on the TV screen or noise. However, this is not a malfunction of this unit or the TV or radio set. In such a case, switch the power of the unit OFF.



POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed in such a way that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

CARE OF DISCS

How to hold discs

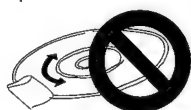
When loading or removing discs, try not to touch their playing surfaces.



Cleaning

Fingerprints or other dirt on the disc may affect sound and picture quality.

To clean your discs, use a soft clean cloth to wipe them. If necessary, moisten a soft cloth with diluted neutral detergent to remove heavy dirt or fingerprints.



Do not wipe in a circular direction
(Concentric scratches in the disc groove tend to cause noise.)



Gently wipe from the inside toward the outer edge.

Discs must not be cleaned with record cleaning sprays, or static prevention sprays, etc. Also do not use volatile liquids such as benzene, or thinner, etc.

NEVER PLAY CRACKED OR WARPED DISCS.

- The disc revolves in the player at high speed when it is played. Never play a cracked, scratched or warped disc. This may damage the player or cause it to malfunction.



After using discs, store them upright

After playing a disc, always remove it from the player and return it to its jacket. Then store it standing upright away from heat and humidity.

- Store discs carefully. If you store discs at an angle, or stacked on top of each other, discs may become warped even when in their jackets.
- Do not leave discs in locations such as the seat of a car, which may become excessively hot.

CAUTION WHEN USING THE DISC

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Unauthorized public performance, broadcasting or copying is a violation of applicable laws.

CLEANING CARE

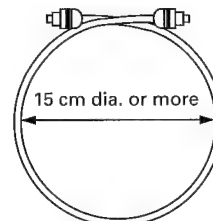
Use a soft, dry cloth for cleaning. For stubborn dirt, soak the cloth in a weak detergent solution; wring well first and wipe. Use a dry cloth to wipe it dry. Do not use any volatile agents such as benzene or paint thinner, as they may damage the surface of the player.

Lens cleaner

The player's pickup lens should not become dirty in normal use, but if for some reason it should malfunction due to soiling, contact your nearest PIONEER authorized service center. Lens cleaners are commercially available, but special care should be exercised in their use since some may cause damage to the lens.

Notes on using the optional optical cable

- Do not route cords around sharp angles. When storing, wind the cords so that they have a diameter of at least 15 cm.
- When connecting, push all the way into the terminal.
- Do not use cords with a length of over 3m.
- If moisture or dust has collected on the plug, wipe it with a soft cloth before connecting.



Never use CD's with special shapes.

CD's with special shapes (heart-shaped CDs, octagonal CDs, etc.) cannot be played on this set. Attempting to do so may damage the set. Do not use such CDs.



Terms

Dolby digital (AC-3)*

The maximum 5.1 channels of audio used in the surround system (Surround Digital) for movie theaters is digital data compressed by AC-3.



For DVD discs, the digital output PCM/□□ jack (coaxial or optical) must be connected to the amplifier or processor's digital input AC-3/PCM jack.

PCM

PCM stands for Pulse Code Modulation and is digital audio. The digital audio of CD or DVD discs is PCM.

Title number

Title numbers refer to titles of movies etc. As DVD discs have a large capacity, many movies can be recorded on one disc. For example, when 3 different movies are recorded on a disc, they are divided into TITLE 1, TITLE 2 and TITLE 3. Playback can be operated by selecting the title number.

Chapter number

Chapter numbers are the numbers assigned to sections on a title of the disc, similar to chapters in a book. If the disc includes these numbers, you can locate the section you want very quickly using chapter search and other functions.

Time number

The time number is the playback lapse time of a title in the disc from its beginning. The scene you want to locate can be searched for with the time number using the time number function etc..

TOC

TOC (Table Of Contents) information is data other than audio signal data, recorded at the beginning of a disc. As the name implies, it's like the list of contents in a book, with information such as the number of songs and playback time.

Video CDs

These discs provide MD quality sound, and VHS quality video images. Thanks to MPEG1, the digital signal compression system, a single disc provides up to 74 minutes of continuous digital audio and video. There are also Video CDs with Playback Control (PBC) that let you select playback of desired scenes using menus, and view still images.

DTS (Digital Theater System)**

The DTS is one of the surround systems like Dolby Digital (AC-3).

For DVD discs, the digital output PCM/□□ jack (coaxial or optical) must be connected to the amplifier or processor's digital input DTS jack.

THX

The THX is the technology for reproducing movie software programs in home with the same feeling of presence as movie theaters.

* Manufactured under license from Dolby Laboratories, "Dolby", "AC-3" and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works, © 1992-1997 Dolby Laboratories, Inc. All right reserved.

** "DTS" and "DTS Digital Surround" are trademarks of Digital Theatre Systems, Inc.

Terms

Playback Control (PBC)

This refers to signals recorded on a Video CD (Version 2.0) enabling playback control.

You can use menus recorded on discs with PBC for easy, interactive search for desired scenes, and playback.

You can also enjoy viewing high-resolution/standard resolution still images.

High-resolution images

If the high-resolution still images are recorded on the Video CD, you can enjoy viewing them with four times the resolution of moving images.

Multi-angle

When you watch regular TV programs you are watching the image filmed through the TV camera. Because of this the picture is displayed on your TV from the view point of the TV camera's position. In a TV studio the image is filmed by many cameras at the same time, and one of those images is selected by the program director and transmitted to your TV. If all the filmed images were transmitted to your TV you would be able to select the camera image you want. Some DVD discs are recorded with the angles of all camera's used for filming and these can be selected using this player. These types of discs are called multi-angle discs.

Aspect

Aspect ratio refers to the length to height ratio of TV screens. The ratio of a normal TV is 4:3, while the ratio of a Hi-vision TV or wide TV is 16:9. This allows you to enjoy a picture with a wider perspective.

Parental level

This function was suggested by parents. Parental level restrictions are restrictions incorporated into scenes that parents do not wish their children to view.

Condition memory

"Condition" refers to the various mode settings etc. On this player, various conditions, such as those set during playback etc. can be memorized. This function allows you to play back the same disc at any time without having to reset the condition settings.

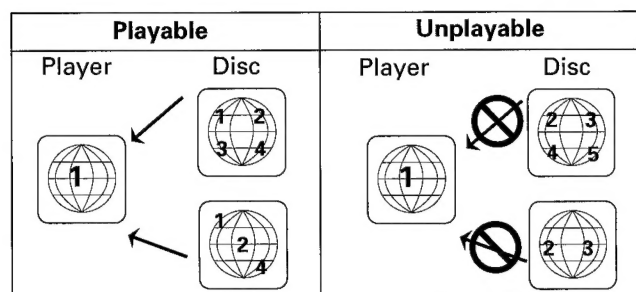
Subtitle

Subtitles are language titles superimposed on movies etc. Up to 32 different subtitle languages can be recorded on a DVD disc. The subtitle function can be used to select the language of your choice.

Regional restriction codes (region number)

Regional restriction codes are built-in to DVD players and DVD discs for each sales region. If the regional code of the DVD player does not match one of the regional codes of the DVD disc, playback will not be possible.

- This unit's region No. is displayed on the rear panel.



Optical digital output

Normally, audio is converted to an electric signal and transmitted through an electric wire from the player to the amplifier etc.. Changing this signal to a digital signal and transmitting it through an optical fibre cable is called optical digital output. (Optical digital input is the side receiving the signal such as the amplifier etc..)

The optical digital output setting can be changed on this unit.

- PCM/DOLBY DIGITAL•DTS: Choose this setting when connecting to the Dolby Digital (AC-3) optical digital input of an amp equipped with a Dolby Digital (AC-3) decoder or with a DTS decoder.
- PCM: Choose this setting when connecting to the optical digital input of a regular amp, a Dolby Pro Logic amp etc.

Dynamic range

Dynamic range refers to the difference between the maximum conversion level for transmission/conversion of distortion free signals and noise and/or the minimum level limited by the equipment's characteristics. Decibel units (dB) are used.

Specifications

General

System DVD system, Video CD and Compact Disc digital audio system
 Laser Semiconductor laser: wavelength 650 nm
 Power requirements: AC 120 V, 60 Hz
 Power consumption 52 W
 Weight 15.8 kg (34 lb 13 oz)
 Dimensions 460 (W) x 370 (D) x 144 (H) mm
 (18 1/8 x 14 9/16 x 5 11/16 in.)
 (Not including protruding cables, etc.)
 Operating temperature +5°C to +35°C (+36°F to +96°F)
 Operating humidity 5% to 85% (no condensation)

S-Video Output (2 pairs)

Y (luminance) - Output level 1 Vp-p (75Ω)
 C (color) - Output level 286 mVp-p (75Ω)
 Jacks S-VIDEO jack

Video Output (2 pairs)

Output level 1 Vp-p (75Ω synchronous negative)
 Jacks RCA

Component Video Output

Output level Y:1 Vp-p (75Ω synchronous negative)
 C (color) - Output level Cb,Cr: 0.7 Vp-p (75Ω)
 Jacks RCA jacks



Audio Output (2 pairs)

Output level
 During audio output 200 mVrms (1 kHz, -20 dB)
 Number of channels 2
 Jacks RCA

Digital audio characteristics

Frequency response	4 Hz to 44 kHz (DVD fs: 96 kHz) 4 Hz to 22 kHz (DVD fs: 48 kHz) 4 Hz to 20 kHz (CD)
S/N ratio	115 dB (EIAJ)
Dynamic range	108 dB (EIAJ)
Total harmonic distortion	0.002 %
Wow and flutter	Limit of measurement (±0.001% W. PEAK) or lower (EIAJ)

Other Terminals

Optical digital output (PCM/  /DTS) Optical digital jack
 Coaxial digital output (PCM/  /DTS) RCA jack
 Coaxial digital output (PCM) RCA jack
 CONTROL IN /OUT Minijack (3.5ø)

Accessories

Remote control unit 1
 AAA (R03) dry cell batteries 2
 Audio cord 1
 Video cord 1
 Operating Instructions 1
 Warranty card (Region number ① only) 1

NOTE:

The specifications and design of this product are subject to change without notice, due to improvement.



Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion-and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decibel

Level	Example
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet.

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.



Should this product require service in the U.S.A. and you wish to locate the nearest Pioneer Authorized Independent Service Company, or if you wish to purchase replacement parts, operating instructions, service manuals, or accessories, please call the number shown below.

Please do not ship your product to Pioneer without first calling the Customer Service Department at the above listed number for assistance.

PIONEER ELECTRONICS SERVICE, INC.
CUSTOMER SUPPORT DIVISION
P.O. BOX 1760, LONG BEACH,
CA 90801-1760, U.S.A.

For warranty information please see the Limited Warranty sheet included with your product.

Should this product require service in Canada, please contact a Pioneer authorized dealer in Canada to locate the nearest Pioneer Authorized Service Company.
Alternatively, please contact or ship your defective product freight prepaid to one of the following Factory Service locations closest to you:

Pioneer Electronics of Canada, Inc.

Factory Service East
300 Allstate Parkway
Markham, ON L3R 0P2
(905) 479-4411

Factory Service West
13911 Bridgeport Road
Richmond, BC V6V 1J6
(604) 278-1014

For warranty information please see the Limited Warranty sheet included with your product.

Si ce produit doit être réparé au Canada, veuillez vous adresser à un distributeur autorisé Pioneer au Canada pour obtenir le nom de la société de service autorisée Pioneer la plus près de chez vous. Ou encore, veuillez communiquer avec le centre de service en usine Pioneer le plus près de chez vous ou faire parvenir l'article défectueux, port payé, à ce centre.

Pioneer électroniques du Canada, Inc.

Service en usine - Est
300 Allstate Parkway
Markham (Ontario) L3R 0P2
(905) 479-4411

Service en usine - Ouest
13911 Bridgeport Road
Richmond (C.-B.) V6V 1J6
(604) 278-1014

Pour obtenir des renseignements sur la garantie, veuillez vous reporter au feuillet sur la Garantie Limitée qui accompagne le produit.

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